

ST inside
ACTION

February 1994 • Issue 97 • £3.60 Overseas £3.65 Hk\$17.00

EURO PRESS
ENTERPRISE

ATARI ST USER

JAGUAR

**Knocking spots off the competition!
The world's first 64-bit
console reviewed**

THE BEST!

HiSoft program worth

£40



FEBRUARY
1994

ATARI
ST USER

EXCLUSIVE

TEMPUS 2

Write programs and documents with this excellent text editor



SOMA

An intriguing and challenging puzzle

PLUS: The fascinating game Naarjek and brilliant sound sampling utility Sound Lab



MEMORY UPGRADES
How to increase
your ST's power



REVIEWED: MAG!X2, DA VECTOR PRO, UVK 6, DIGITAPE AND MORE

QUALITY AT THE R

OUR NEW SHOWROOM IS NOW OPEN:

126 Fore Street, Upper Edmonton, London N18 2AX. Tel: 081-345 6000

SCANNER

Newcomers who like to scan detailed graphics or complicated images experience with the ALFADATA a favourable alternative to typing or re-scaling and investing a lot of time. Advanced users who insist on the efficient character recognition and comfortable graphic software. Choose between ALFADATA Plus or ALFADATA Plus OCR.



ALFADATA PLUS
£119.00

ALFADATA OCR
£149.00

Colour Scanner for the Falcon
£399.00

Mono Scanner for the Falcon
£99.00

SOFTWARE

WORD PROCESSORS

Wordwriter	£45.00
1st Word Plus V3.2	£39.95
Calligrapher Pro	£73.95
Calligrapher Gold	£104.95

DTP SOFTWARE

Calamus 1.09N	£95.00
Pagestream V2.2	£149.00
Calamus 5	£325.00
Timeworks Publisher 2	£55.95
Calamus SL	£545.00
OCR Software	£49.95
Touch Up (upgrade)	£27.00
Easydraw (supercharged)	£29.95
Cyber Studio	£19.00
Cyber Control	£19.00
Cyber Paint	£19.00
Truepaint (for Falcon)	£32.95
Human Design Disk	£9.00
Future Design Disk	£9.00
3D Fonts 1	£9.00
Cad 3D	£9.00
Cad 3D Developers' Disk	£9.00
Neo Desk 3	£28.00
That's Funface	£9.00
Signs and Banners	£15.00
Calendar + Stationery	£15.00
Greeting Cards	£15.00

MUSIC SOFTWARE



Emagic Notator SL	£279.00
Emagic Creator	£179.00
Emagic Unit 2	£230.00
Cubeat	£150.00
Cubase Version 3	£319.00
Cubase Light	£70.00
Notator Alpha	£170.00
Cubase Audio	P.O.A.

ACCESSORIES

Mono-Colour Monitor	
Switchbox	£14.95
Multi-sync Switchbox	£29.95
Printer Cable	£6.00
Modem Cable	£6.00
Null Modem Cable	£6.00
Serial Cable	£6.00
Philips/Atari Cable	£10.00
Scart Cable	£10.00
5.25" External Drive	£29.00
3.5" External Drive	£50.00
3.5" 1.44Mb External Disk Drive	
for Atari/Mega STE/TT	£99.00
Blitz Turbo	£25.00
Ripper Cartridge	£25.00
Power Cable (kettle lead)	£6.00
Mouse Pad (picture)	£5.00
Blank Disk (branded)	£4.49
Spike Protectors	£30.00
Dust Covers (all sorts)	£6.00
Soldering Irons	£10.00
SCSI II Cable	£29.95
Hard Drive Fans	£5.00
Midi Cables	£10.00
D.M.A. Cable	£6.00
SCSI Cable	£6.00
SCSI Splitter Cable	£9.99
Optical Mouse Pad	£10.00
Printer Ribbons (all sorts)	P.O.A.
Toner Cartridge (all sorts)	P.O.A.
Disk Box (40 capacity)	£4.95
Atari to TV cable	£10.00
Printer Switchbox	£9.95

ICD

ICD HOST (SCSI) ADAPTORS

AD SCSI ST	£100.00
AD SCSI plus ST	£110.00
The Link	£89.00
ICD Utility Disk + Manual	£24.95
Clean Up ST	£14.95

ATARI FALCON 030

A 16MHz 32 bit computer for fast processing, it comes with a 1.44Mb floppy disk drive, with built-in speaker.

Falcon 030 030	POA
Falcon 030 4Mb	POA
Falcon 030 4Mb + 8.5Mb	POA
Hard Drive	POA
Falcon 030 14Mb + 8.5Mb	POA
Hard Drive	POA
Falcon 030 4Mb + 120Mb	POA
Hard Drive	POA
Falcon 030 4Mb + 210Mb	POA
Hard Drive	POA

Falcon Eagle Sonic 32 (32MHz)
Accelerator for Atari Falcon 030
£199

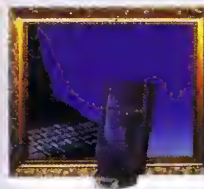
FALCON MONITORS

Hi-Res mono monitor for	
Falcon 030	£99.00
SVGA colour for Falcon 030	
28 dot pitch	£239.00

Includes adaptor cables from Falcon to the monitors.

FOLD-A-FAXMODEM

AFM-9624P



- Foldable: Can be turned up and down within a 180-degree arc
 - Space-saver: Occupies only 5cm of rear space
 - Maximum Safety: Prevents accidental bumping that may lead to disconnection and eventual damage
- Fax/Modem only
- Fax/Modem with straight fax software

SCSI BARE HARD DRIVE

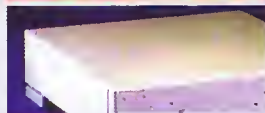
20Mb	£55.00
40Mb	£99.00
52Mb	£199.00
85Mb	£299.00
127Mb	£279.00
170Mb	£299.00
240Mb	£399.00

BITS AND PIECES

Internal Power Supply for	
Atari (ST/STFM/STE)	£32.95
Atari Internal Disk Drive	£45.00
Keyboard Atari STFM-STE	£59.00
STE Motherboard No RAM	£99.00
D.M.A. Chip	P.O.A.
TOS 2.06 STE/STFM	£59.00
12Mb STFM Motherboard	£69.00
Overcasing STE/STFM	£28.00
Atari Original Mouse	£8.00

FALCON 030

EXTERNAL HARD DRIVE



An economical enclosure designed to mount a single, half height, 3.5" device. Features a 40 watt power supply with a universal AC input for use throughout the world and a low noise 15C.F.M. fan to provide device cooling. Also includes the Falcon SCSI II cable.

SCSI II Casing	£129.00
40Mb + SCSI II Casing	£199.00
52Mb + SCSI II Casing	£259.00
127Mb + SCSI II Casing	£339.00
170Mb + SCSI II Casing	£369.00
240Mb + SCSI II Casing	£399.00
540Mb + SCSI II Casing	£599.00
1.2 Gigabyte + SCSI II Casing	£999.00
Floptical	£389.00

INTERNAL HARD DRIVE

High quality internal 2.5" IDE Hard drives for the Falcons, including mounting bracket and IDE cable.

40Mb	£129.00
65Mb	£169.00
85Mb	£199.00
120Mb	£249.00
240Mb	£499.00
330Mb	P.O.A.

FALCON 030 EXTRAS

SCSI II Cable	£34.95
ST Monitor Cable	£15.00
SVGA Monitor Cable	£15.00
Musicon	£43.99
Truepaint	£33.99
Cubase Audio	P.O.A.
Notator Logic	P.O.A.
400 DPI Mouse	£17.95
Microphone	£29.95
Midi Cable	£12.95
Stereo Speakers	£29.95
Stereo Headphones	£16.95

UTILITY SOFTWARE

ICD Pro Utility	£38.00
Multitos	£49.95
Speedo GDOS inc 14 fonts	£39.95
Datalite 2	£49.95
Diamond Edge	£44.95
Diamond Back 2	£34.95
Migraph OCR	£49.95
NVDI v2.5	£49.95

OFFICIAL ATARI

REPAIR CENTRE

New service centre/repair for most Atari computers. We offer a quotation service of £10 for which we will examine your computer and report back with an exact quotation price for the repair, if the repair is carried out the £10 is then deducted from your bill

All prices are inclusive of VAT.
Products advertised represent a small sample of our in-stock range.

RIGHT PRICE...

ATARI MEMORY UPGRADES

Marpa XTRA-RAM ST *Deluxe*
INSTRUCTIONS

INCREASE YOUR MEMORY!

ST/STF/STFM and MEGA ST	
XTRA RAM Board 0Mb.....	£24.95
512K to 1Mb.....	£29.95
1Mb to 2Mb.....	£65.00
2Mb to 4Mb.....	£120.00
8Mb for Atari ST.....	P.O.A.
Falcon 14Mb.....	£699.00
Virtual Memory.....	£49.00

GASTEINER STE UPGRADES

SIMM to SIPP Adaptor.....	£3.00
1/2Mb.....	£4.95
2Mb.....	£45.00
4Mb.....	£90.00

FORGET-ME-CLOCK II

Clock Cartridge for the Atari ST/STE and Falcon series

Clock Cartridge.....	£11.99
Clock Cartridge W/Thru port.....	£14.99

ATARI

Atari 520 STE.....1/2 Mb.....	£169.00
Atari 520 STE.....1Mb.....	£189.00
Atari 520 STE.....2Mb.....	£265.00
Atari 520 STE.....4Mb.....	£320.00
Atari 1040 STE.....1Mb.....	£199.00
Atari 520 STF.....	£149.00

MONITORS

GASTEINER DOES IT AGAIN. Sold over 5,000 units of their high resolution Atari replacement monitors

Gasteiner GM146 no speaker.....	£119.00
Gasteiner GM148 with speaker.....	P.O.A.
Gasteiner multisync monitor.....	£369.00
Philips 8833 MkII.....	£199.00
Atari SC1224.....	£179.00

PRINTERS

HP 510 Mono Printer.....	£319.00
HP 550C Colour Printer.....	£630.00
Seikoshia IP 104 Laserprinter.....	£549.00
Ricoh Laserprinter.....	£769.00
HP Laserjet 4L.....	£699.00
Citizen Swift 200.....	£199.00
Citizen 120D.....	£129.00
Citizen Swift 240 Colour.....	£299.00

STAR BARGAIN OF THE MONTH

**40Mb Hard Drive
£199.95**

AUTO MOUSE/ JOYSTICK SWITCH

Allows you to instantly select either your mouse or joystick by a simple click on your mouse. You won't need to fumble around under or behind your computer to swap your mouse and joystick cable ever again, and also it saves your joystick port

**AT A GIVEAWAY PRICE
£9.99**

ERGONOMIC DESIGN TRACKBALL SERIES



**One Colour
£29.99
Two Colour
£34.99**

GASTEINER HARD DRIVE



Due to the massive popularity of our Gasteiner Hard Drives which we have been manufacturing for the past five years, and the demand for our cases, we are now producing a choice of cases ranging from 3.5" half height to 5.25" full height which can take a massive 1.2 Gigabyte hard drive. We also have in stock the latest in hard drive cases which enable you to have up to 8 SCSI hard drives fitted internally all in one case. Compatible with all Atari ST/STF/STFM/STX/Mega ST/Mega STE computers.

20Mb.....	£169.00
40Mb.....	£199.95
52Mb.....	£269.00
85Mb.....	£299.00
127Mb.....	£349.00
170Mb.....	£379.00
240Mb.....	£499.00
540Mb.....	£749.00
1.2 Gigabyte.....	£1199.00
Floptical.....	£379.00
Optical 128Mb.....	£950
Optical 128Mb Disk.....	£50

IF YOU REQUIRE A FLOPTICAL WITH THE ABOVE HARD DRIVES PLEASE CALL

E. & O. E. Prices subject to change without notice.
Goods subject to availability.
Specifications subject to change without notice.
All Trademarks acknowledged.

**The ICD Pro Utilities
£38.00**

Alfa Data Mega Mouse with Mouse Mat & Holder
£14.95

QUALITY MOUSE FOR ATARI



**UNDER NINE POUNDS
£8.95**

DISKETTES



100% ERROR-FREE. You get total reliability. Each diskette is subjected to more than 70 chemical, magnetic and electrical tests to ensure it delivers exceptional accuracy and readability

**AS LOW AS
£4.49
BOX OF 10**

OPTICAL MOUSE & MOUSE-PEN SERIES



**Optical Mouse £29.95
Optical Mat £9.99**

**Optical Pen Mouse
£34.95**

MOUSE 400



New from Japan. The 400 DPI mouse with Hi-tech mechanism, microswitch buttons, small, fits nice and snug in the palm of your hand. All at an affordable price of

£14.95

BUILD YOUR OWN HARD DRIVES FOR ATARI COMPUTERS

Casing.....	£35.00
45 Watt P.S.U.....	£35.00
SCSI Cable.....	£6.00
DMA Cable.....	£6.00
Power Cable.....	£6.00
SCSI to Centronics Cable.....	£18.00
G.E. Soft Host Adaptor.....	£59.95
SCSI II Cable for Falcon.....	£34.95
Top Link Controller.....	£75.00

Official purchase orders welcome from Educational establishments and major corporates. (Strictly 14 days net). Please phone for approval.

All prices include VAT. Prices and specifications subject to change without notice. E&OE.

All goods under £50 please add £3.50 p&p and all goods above £50 please add £10 Courier Service. Next day service please call.

**Unit 2, Millmead Business Centre
Mill Mead Road, Tottenham Hale,
London N17 9QU**

Tel: 081 365 1151 (3 lines)

Fax: 081 885 1953

Major credit cards accepted



...No COMPROMISE

Contents

COVER
FEATURE



JAGUAR

**Why Atari's new console simply
knocks the spots of the competition**

62

midi and music ♦ emulation ♦ comms ♦ dtp ♦ business ♦ falcon	
<h2 style="color: purple;">Aspects of the ST</h2>	
Midi and music.....	86
News on a bulletin board which could be the ideal way for musicians to keep in touch	
Emulation.....	89
What to do if parts of your ST break down and why Atari got it right with their ROM-based TOS	
Communications.....	91
A new and comprehensive guide for Internet newcomers is a perfect reference work and tutorial	
DTP.....	93
A series on document design kicks off discussing the right fonts and looks for restaurant menus	
Business.....	95
How to keep your business on the right side of the law and several ways in which the ST can help	
Falcon.....	97
We take a peek at some direct-to-disk recording programs that will turn your Falcon into a hi-fi	

ST ACTION

**Domark's latest
takes pole
position**



F1

<p>Review of the</p> <p>year.....60</p> <p>Jaguar.....62</p> <p>Cybermorph.....62</p> <p>Talkback.....66</p> <p>Speedball 2.....67</p>	<p>Genesis.....68</p> <p>F1.....70</p> <p>Manga.....74</p> <p>Jaguar developers.....76</p> <p>Space Crusade.....79</p> <p>Robocod.....80</p>
---	--

Page
59

**Twenty-four pages of complete
and unrivalled ST games coverage**

**Next
month
on sale
Feb 17**

specials

22 Memory upgrades

With an increasing number memory-hungry programs being launched it's never been more important to upgrade

26 Cross purposes

Hints and tips on getting text, sound and vision between Atari computers and industry-standard machines

40 Don't be bitten

Sound advice to ensure readers who buy software and hardware through mail order don't get bitten by the sharks

reviews

30 DigiTape

Our music expert puts this revolutionary tapeless recording system through its paces

33 UVK 6

This leading virus killer has just been given many new features including the ability to be used as a desk accessory

34 VideoMaster Falcon

A low cost multimedia package found to be ideal for full colour video digitising and 16-bit stereo sampling

36 DA Vector Pro

The best outline art package for Atari computers is now available with enhanced capabilities. We test it out

47 EdHak 3

Improvements to this versatile text editor make it a serious competitor in a crowded market

50 Mag!x 2

A multitasking system enabling ST owners to switch from program to program in an instant

READER OFFERS

18 Tempus 2

Complete this month's text editor giveaway with a 124-page manual and massive upgrade savings

88 Vidi ST (12)

Last month we gave away Vidi ST (12) digitising software - now save £30 on the full system

regulars

7 News

Jaguar to target Sega and Nintendo console owners, Government give games epilepsy all-clear, and much more

10 Euro News

The latest highlights from the continent including a new morphing program bringing Hollywood-style video effects to the home

12 CoverDisk

Discover more about this month's disk and how to use the wonderful software it contains

16 Disk tutorial

We take you by the hand and show how to get the most from this month's excellent CoverDisk giveaway, Tempus 2

44 Win a printer!

Gems from the public domain this month include games Storm, Kev's World and Tri-Hell 2 plus a selection of useful utilities

48 Public Sector

Ensure you don't miss another issue of your favourite magazine, save loads of money and pick a free gift too

53 C programming

Opening up a dialogue box and making things happen with our Othello program

55 Write Now

Too much Falcon coverage vs the need for Falcon support and how your kids are buying computer porn

56 Advice Service

Solutions to your problems on buying a second drive, a bleeping keyboard, power supplies and adding memory

86 Aspects

Seven pages of hints and tips for users of key ST applications - Midi, emulation, comms, Falcon, DTP and business

90 Back Issues

A chance for you to pick up copies of the magazine that you missed - and, of course, some great CoverDisk software!

96 Classifieds

More ST-related products in our free advert section. Pick up a bargain!

The CoverDisk



Write programs and documents with Tempus 2, HiSoft's feature-packed text editor worth £40, but given away free on this month's disk PLUS:

- Load programs quickly using the great GoGoST GEM-based menu system
- Albion, a powerful file information utility to replace the ST's Show Info function
- Have some fun playing 3D puzzle Soma and the challenging Naarjek IV
- A colouring book program which allows kids to use the mouse to colour in ten pre-drawn pictures
- Manipulate sound samples in various formats using Sound Lab, a brilliant program for use with ST Replay and DaataSound
- Convert sound files from one format to another with Five to Five

The DISK starts on page 12

EDITOR John Butters
ART EDITORS Terry Thiele, Matthew Bell, Carl Fax, Darren Evans, Phil Morse, Jonathan Maddock, Simon Clays, Adam Phillips, Tina Macbeth
TECHNICAL EDITOR Simon Lees
PRODUCTION EDITOR Barbara Newell
STAFF WRITERS Lucy Oliver
EDITORIAL ASSISTANT Sandra Childs
AD MANAGER David Wren
AD PRODUCTION COMAG (0895) 444055
MARKETING MANAGER 051-357 2961
CIRCULATION DIRECTOR
DISTRIBUTION
SUBSCRIPTIONS

Published by Europress Enterprise Ltd,
Europa House, Adlington Park,
Macclesfield SK10 4NP
Tel: 0625 878888 (all departments)
Fax: 0625 850652

CHAIRMAN Derek Meakin
MANAGING DIRECTOR Ian Bloomfield
Member of the Audit Bureau of Circulation

Atari ST User is an independent publication and Atari are not responsible for any of the articles in this issue or for any of the opinions expressed.

© 1994 Europress Enterprise Ltd.
No material may be reproduced in whole or in part without written permission.

While every care is taken, the publishers cannot be held legally responsible for any errors in articles, listings or advertisements.

EUROPRESS
ENTERPRISE LTD

Printed in the UK by Carlisle Web Offset, Carlisle, Cumbria

System Solutions

World Record

68000 CPU running at 36MHz

Two new Accelerators are now available for the MegaST and ST(FM) computers. Performance and price are sensational. The T28 with a 28MHz clock is 3.5 times faster and the T36 with a 36MHz clock is 4.5 times faster than the original ST's clock. The use of the original 68000 processor guarantees near perfect compatibility. CPU caching is switchable for added compatibility with the cartridge port devices. OTP, Graphics Software and Cubase show a fantastic speed increase. Compared with a standard ST with NVOI and without Blitter, Gembench gives the following results:

	ST(FM)	T28	T36
CPU	100%	299%	373%
Graphics	100%	949%	1097%
Average	100%	763%	890%

The combination of the T28/T36 and NVOI transforms the humble ST into a powerful graphics workstation - a dream come true for all those who want more speed at an affordable price.

T28 Accelerator, 28MHz, 64kb Cache **£189**

T36 Accelerator, 36MHz, 64kb Cache **£279**

NVOI bought with either **£39.95**

High Density

elCo doubles Disk space to 1.44Mb!

- ★ Automatic floppy disk detection
- ★ Compatible with your floppy disks
- ★ Software is included. (ACC and CPX)

Kit price still only **£79.95 inc VAT**

High Res Monitors

The SM14s is a perfect replacement for the Atari SM124/5 monochrome monitors, exceeding the original specifications. The 14" high resolution paperwhite FST gives a perfectly centred, crisp and sharp image without blurring at the edges.

"Essential Buy, 90%"

ST Review, May 93
without audio

SM14 £129.95

with audio

SM14s £149.95



FLY LIKE THE WIND...

NVDI replaces the Atari display routines. Screen updates with NVDI are 3-10 times faster. Works with all TOS versions on all Atari ST, MegaST, TT and for the Falcon.

MultitOS and SpeedoGDOs compatible.

"Scrolling through a long text file in 1st Word Plus took half the time ... Calamus, Calligrapher and Wordflair also showed a marked improvement ... Compatibility is remarkable and we have yet to find a program that is not compatible with NVDI ... a must for all ST and Falcon owners"

ST Review Issue 16, August 1993.

NVDI Version 2.5 - £49.95

MiniS

The small award winning SCSI Hard Disk System at an affordable price, for all computers with SCSI connections.

Awarded 92%, "Essential buy"

Atari ST Review Christmas '93

ATARI ST
ST Format
Gold Award
93% Feb 1993



- ★ Quiet fan
- ★ Dual SCSI port
- ★ Device Number Switch
- ★ Internal Power Supply
- ★ Small (2.5x6x8.5in) (WxHxD)
- ★ Smart and tough plastic case
- ★ 2 Year Warranty on all drives

	TT/Falcon	ST(FM/e)
127MB	£279	£319
170MB	£309	£349
270MB	£359	£399
340MB	£459	£499
525MB	£699	£739
1080MB	£999	£1049
1800MB	£1499	£1549

Please add £20 to ST(FM/e) if the IC0 Link is required.
Heavy Duty professional cases with 60W Power Supply, add £50. All Prices include VAT

To order and for further information
telephone or write to:

System Solutions

Windsor Business Centre, Vansittart Road,
Windsor, SL4 1SE Fax: 0753-830344

Mail Order Telephone
0753-832212

or come to our London Showroom at:

The Desktop Centre

17-19 Blackwater Street, London, SE22 8RS

Tel: 081-693 3355 Fax: 081-693 6936

For small items under £50 please add £2.95 P&P

Large items over £50, courier charge £10

Dealer enquiries are welcome

KeyClicks

THEIR BACK!!

At long last we have this invaluable keyboard accessory back in stock. The Atari keyboard has never been famous for its good feel, but now you can cure this with Keyclicks. These are small rubber "mushrooms" that fit between the keypad and the actuator underneath. They will transform the feel of the keys. Easy DIY installation... for ST(FM/e), and Falcon 030 computers.

Price: **£19.95** for a complete set.

Special Offer:

If purchased with any other product only **£15.00**

The Falcon Column

Are you planning to purchase a Falcon? How much of your old kit will work on it? Or do you just feel tempted and want to know how much a complete system would cost? For advice and a personal quote phone:

London: 081-693 3355 or

Windsor: 0753 832212

Now in Stock

Falcon030 Starter Pack:

4mb, 14" Mono Monitor & BlowUP **£889**

BlowUP 030 the Display Expander
Using Software and/or Hardware the display expands up to 400%. Virtual screens up to 8000x are also possible.

BlowUP 030 - Software £15.00

up to 880x608 53/101Hz

BlowUP 030 - Hard 1 £49.95

Excellent for Multiscan's (1024x768)

BlowUP 030 - Hard 2 £69.95

VGA and other fixed frequency monitors.

falconWING SIMM memory board

Accepts 4x 1mb or 4mb SIMM,

falconWING - 0mb £49.95

falconWING - 14mb £699

Price includes trade-in on 4mb memory board.

Falcon Tower £179.95

Integrates the system, space for extra hard drives, separate or replacement keyboard. Phone for the Tower Fact Sheet and price list. DIY or ask for a quote on ready-to-run fitted systems.

We are now
dealers for

Steinberg

Cubase Audio for the Falcon 030 is now
up and running in the Showroom.

Repairs & Upgrades

All repairs are carried out by qualified personnel. If you would like a quote, please ask for an estimate. Need it back in a hurry? Then ask for our professional next-day service. Call us to discuss your upgrade requirements. We fit all quality upgrade products available. We can collect and deliver.

Call the professionals now for your personal quote.

Windsor Service Centre:

Windsor Business Centre, off Duke Street,

Windsor, SL4 1SE. Tel: 0753-818816

London Service Centre:

The Desktop Centre, 17-19 Blackwater Street,

East Dulwich, SE22 8RS. Tel: 081-693 1919

ATARI
WORKSHOP

Jaguar's eyes on console owners

by John Butters

SEGA and Nintendo console owners will be the first people targeted for Jaguar when Atari's European marketing campaign kicks off in March.

With console sales now dropping off across the country, Atari consider it important to attract existing games players who may want to upgrade to the world's most advanced games system.

The firm say Jaguar's user benefit will be extremely easy to show, and according to spokesman Peter Walker: "There is simply no comparison when it comes to graphics and sound."

The company have been overwhelmed by reaction to the machine in the United States, where "wild" consumer demand is far greater than the North Carolina production facility can meet.

So far more than 40,000 Jaguars are claimed to have been delivered to end users, and with a national US roll out during the next couple of months, demand is expected to soar.

A small quantity of machines were even shipped into Britain before Christmas, and although no-one at Atari would say exactly how many, one insider described the number as "embarrassingly small".

The source said many companies had taken orders and money from customers but were not supplied with the consoles they expected. There is no confirmed date for the next shipment.

Atari, meanwhile, continue to be busy whipping up enthusiasm for the device, and for the first time in three years attended the massive Consumer Electronics Show in Las Vegas.

Walker explained the main purpose of the visit was for Atari to forge new links with software developers and distributors, as well as previewing software and peripherals.

Among new products shown to visitors were games *Alien vs Predator* and

Tempest 2000 and an Atari-badged CD-ROM drive, which is described by the firm as a "pretty standard" device.



Mega Drive: Owners to be targeted for a better system

Epilepsy report clears video games

PLAYING video games very rarely triggers epileptic seizures in people without a known history of epilepsy.

That's the finding of a Government-funded report just published following a national study led by Dr David Fish of the National Society for Epilepsy.

It reveals that people who suffer seizures for the first time while playing video games are photosensitive – in other words they are susceptible to flashing light.

The report says of the 30,000 Brits who suffer their first seizure each year, 600 are definitely at risk from epilepsy attacks triggered by TV, video games and other light sources.

Up to 150 people each year may have their first seizure brought on by playing a video game, although there is no evidence that photosensitivity can actually be caused by the games.

Most newly diagnosed photosensitive epileptics are between seven and 19 years old, it adds.

Consumer affairs minister Lord Strathclyde

said: "This report shows that photosensitive epilepsy affects a very small number of people.

"A much smaller number suffer their first seizure while playing video games – roughly the same as through watching television.

"People who suffer must always seek medical advice and those with known epilepsy should ask their doctor whether they are at risk from seizures triggered by video games."

Some computer games makers have recently been putting warnings on the outside of their packaging advising players how to avoid health problems.

The industry watchdog ELSPA's general secretary Roger Bennett said: "There are certain issues that are important regardless of



Games: Government give epilepsy all-clear

whether the player suffers from epilepsy."

"Don't sit too close to the monitor, don't play for too long and don't play in the dark."

News briefs

Playing Falcon

FOUR Falcon-specific games will be launched by Atari during the next few weeks, the firm has just announced.

Among the titles will be Jeff Minter's Llamazap, Steel Talons, Road Riot 4 Wheel Drive, and Evolution Dino Dudes. Each has a target price of £29.99, but distribution remains to be fixed.

Cubase help

CUBASE users wanting to get more from their software are targeted for Cubase Power Users Guide, a new book from Intrinsic Technology (081-761 0178).

The firm say the £12 book's 127 pages help musicians get more from their sequencer, with the inclusion of techniques and working methods. It also has a section on Cubase Audio for Falcon.

Scots online

GIANT online information service CompuServe have added an Edinburgh node to their network. It can be used at access speeds up to 9,600 baud by dialling 021-557 5888.

Online guide

MODEM manufacturer US Robotics have published a free booklet aimed at stimulating increased use of the range of on-line information services available.

The Sportster Guide to On-line Services gives details of the various services which can be accessed using a modem, including several small bulletin boards.

The 40-page guide can be obtained by writing to Sally Roberts, US Robotics, 224 Berwick Avenue, Slough SL1 4QT, or by telephoning 0753 811180.

On sale

WATCH out for the March issue – on sale at a newsagent near you from February 17.

User shows move north

TWO Atari-specific shows held in the Midlands and the north of England recently were the launch pad for several new ST and Falcon products.

Both Atari ST User-sponsored events were well attended and gave Atari enthusiasts a chance to see new products and talk to dealers and other visitors.

On show for the first time from Compo Software were ScreenEye – a real time video image processor that works in full colour on the Falcon – Geneva and Musicom II.

HiSoft showed Clarity 16, Colour Master and Harlekin 3 while System Solutions have re-introduced Keyclicks with a new price of £19.95.

The London-based specialist also showed new multitasking system Magix for the first time in Britain at the Northern show – see our exclusive review on page S0.

The shows saw the launch of many other new products including an alternative operating system called SMS2, Chroma 24 and Straight Fax 2.

Karl Brandt, managing director of System Solutions said: "I enjoy these shows because they are all Atari users. There's no computer snobbery and they appreciate the equipment."

Other exhibitors included 16/32 Systems,

Warzone PDL, CGS ComputerBild, Gasteiner, Falcon Fact File, JCA Europe and Titan Designs.

Following the success of these shows, two dates have been added to this year's calendar in Newcastle and Glasgow. Provisional dates are March 19 and 20 respectively.

More new products are planned for the show including the first ever British showing of the Medusa, an Atari computer clone with a 68040 processor running at 66MHz.

It is claimed to operate 15 times faster than a TT.



Shows: New products and enthusiastic visitors

Forty programs run at once

UP TO 40 programs can run simultaneously on Atari STs using a new operating system developed by Southampton-based company Furst (0489 894674).

Unfortunately, the system – SMS2 – is not compatible with TOS, meaning Atari software will not run on the computer when the cartridge is fitted.

But according to Furst, plenty of programs are already available for SMS2, including public domain software, a C compiler and a word processor.

The system is claimed to bring several advantages to ST owners. "SMS2 offers a

different form of computing," said Furst boss Graham Goodman.

"It's a truly multitasking system that can also be used as a real time system for controlling applications."

Features include a graphical user interface, in-built networking, a suite of utilities, and a special system to enable applications to share memory.

It works with all STs, with the number of programs available for multitasking limited only by memory. SMS2 is, however, incompatible with the Falcon. It costs £135.

Virgin fund football training

VIRGIN Interactive Entertainment have sponsored a scheme to teach Britain's kids how to become skilful football players just weeks after England failed to qualify for this year's World Cup.

The company – publisher of football hit Goal! – handed over a £47,000 cheque recently to the co-ordinator of the Virgin

Games Schools Football Initiative at Arsenal's Highbury ground.

The scheme enables schools to use a Dutch method of coaching called Coerver which uses one ball, one player training instead of the more common 11-players, one ball.

Children of all ages can take part, and after their schools have signed up are asked to find extra sponsorship from friends and family to fund sports equipment needed for the training.

Of the money used to set up the scheme, Virgin and the Government each donated £20,000, and £7,000 came from other sponsors Adidas a football magazine Shoot!

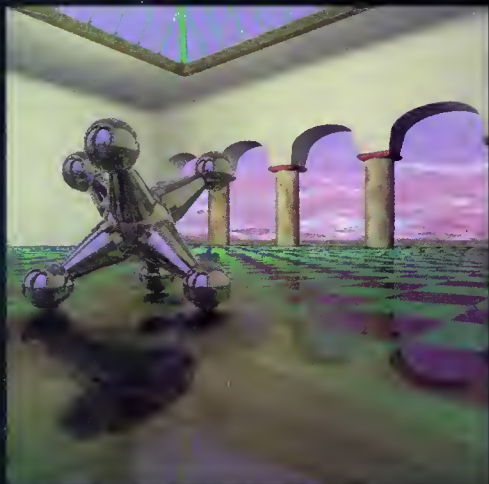
"The sponsorship deal could not have come at a more opportune time following England's failure to qualify for the World Cup," said Virgin's marketing manager Paul Dowling.

"Not only does the scheme encourage kids to learn individual football skills, but it will also give Virgin Interactive Entertainment direct access to around 25,000 UK schools."



Virgin: Handing over £47,000 cheque to improve UK football

Premier Programs For Your Atari



Inshape

Inshape begins with the modeller, which has a variety of tools such as spin, extrude, and a template editor. Many built in primitives like cube, sphere, disc, cylinder, and tube are also included. Models can be assembled from component objects using up to 16 layers. Manipulation tools means an object can be moved, rotated, scaled to an accuracy of 0.0001mm. A wide range of materials are provided including metals, stones, plastic, wood, glass and sand. Many textures are available from marble to multi coloured spots. Even features such as bump mapping, image mapping, and waves are possible. Models can be illuminated, positioned and animated in the scene editor which in turn is your 3D world.

"A feature-packed modelling package that deserves to take the market by storm."

David Nilson. ST Review December 1993.

"It's the best there is."

Clive Parker. ST Format February 1994.

DA's Vector and DA's Vector Pro

The essential graphics, animation and presentation tool.

DA's vector is a colour vector graphics program for any Atari ST(E)/TT and Falcon computer, with at least 2MB of memory.

Unfortunately, we don't have sufficient space on this page to list the 100's

of features included, like the tracer, vectorpath editor,

3d extruder, vector morphing, keyframe animator,

graph and chart generator, picture converter,

colourfade generator, freehand bezier drawing, to

name but some of the features that combine to

make this program not so much

a tool as a fully equipped graphics workshop.

And now the best is getting better with DA's Vector Professional's added abilities. Phone for

further information, also details on the excellent Tutorial which is now available.



"If we were to pick just one winner, without doubt this would be it."

Atari ST User 1993 Awards.



DA's Picture

The brief was simple: "Develop an image retouching program with more power than Retouche Professional and be easy to use." The result "DA's Picture".

DA's Picture is the most recent member to the Digital Arts family of acclaimed products, and a software hardware bundle is available with the Matrix Screeneye Digitiser.

DA's Picture Software £149.00 inc. VAT.

Please note that InShape requires a maths co-processor and works with an Atari TT or Falcon, priced at £149.00.

DA's Vector is £149.00 and DA's Vector Pro is scheduled to be approx £249.00. Chagall Limited is £149.00. The Tabby Graphics Tablet is £49.95 and DigiTape Lite is on special offer at £99.00 with a copy of this advertisement, until Feb '94.

CGS ComputerBild may be contacted on 081 679 7307 for orders and further information, or write to us at:

231 Northborough Road, Norbury, London SW16 4TU.

Euro News

Don Maple rounds up the
latest highlights from the
European Atari scene



Hollywood effects come to the home

UNTIL recently morphing effects were only possible on multi-million dollar purpose-built computers, but now Morpher brings the latest Hollywood video tricks to all STs and the Falcon.

A special version of the program supports a floating point co-processor, works on both 2D and 3D objects and runs fully under GEM and inside windows.

There is a total of five windows of which only three contain graphics. These are the source graphic window, the target graphic window and the "morphed" window. The

remaining two contain the tools and a progress indicator. The Morpher can create animations in up to 99 steps but due to the calculation-intensive nature of the processing this might take a very long time to achieve.

A fast machine such as the TT is therefore recommended. Once the images have been saved a separate program called the Player is used to animate them.

Running in up to 256 colours, the programs are available from Application Systems Heidelberg, Postfach 10 26 46, 69016 Heidelberg, Germany.

Falcon takes to the rails

AT LONG last Falcon-specific games are beginning to appear. Golden Island runs only on the Falcon in the high resolution 256-colour mode.

Because of this, a VGA monitor is recommended, as running the game on an RGB monitor is only possible in the interface mode.

The game is based around a railway network and the goal is to drive a train collecting gold, which has been hidden all over the place by a bunch of criminals.

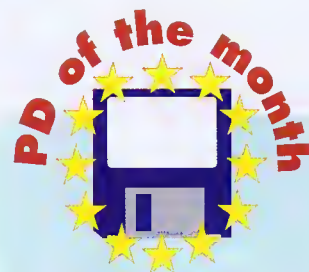
The train contains a crane which is used to pick

up the gold and to load it in. Various other objects can also be collected and used along the way.

In the course of the game enemy trains must be destroyed without using any weapons and this can prove a formidable challenge.

It supports those rarely-used extended joystick ports and there are plans to support the new Atari Joypad game controller.

Golden Island costs DM59 (about £25) and is available from WBW-Service, Willi B. Werk, Osterfeuerbergstr. 38, 28219 Bremen, Germany.



WE'LL turn away from serious applications this month and introduce a game. Utopos is a shareware offering from a group of Finnish ST enthusiasts who go by the name of Aggression.

It's a shoot-'em-up, programmed to high professional standards with excellent graphics.

The program makes full use of all of STE features. This means 32 colours, eight channels of sound and smooth scrolling.

A horizontally split screen supports two players, each controlling their own space-ship.

Aggression is bilingual and speak both English and French. The playable demo version is available at the Necronomicon BBS in Finland which can be telephoned on +358-0-3882710.

For a full version send £6 in cash (the authors insist on cash) to Jani Penttinen, Lahdekuja 2b5, 16300 Orimattila, Finland.

An expanding Portfolio

SEVERAL Portfolio products have just been announced by Eickmann Computer, proving that the grandfather of all pocket computers is still alive and kicking.

The memory card called Stefanie comes populated with 128k of RAM, but the really interesting products are the floppy and hard disk interfaces.

For DM300 (about £120) you get the Diskfolio Interface with serial, parallel and floppy drive ports.

The bundle also contains an ST-compatible floppy drive. The hard drive version, called Universal Interface, also has both serial and parallel ports.

In addition, it contains room for up to 512k of RAM and a built-in ROM with a software driver, a terminal program and P-BASIC. The hard disk connects to the parallel port.

Contact Eickmann Computer at In der Roemerstadt 259, 60488 Frankfurt am Main, Germany.

CHRONOS, the calendar/appointment planner with a difference reviewed in last November's Euro News has just been released in v1.5.

Improvements include MultiTOS compatibility, more appointments are shown during booting, additional astronomical data is displayed and the appointments now extend all the way to the end of year 2107 for those who intend to live that long.

To register send £12 to Daniel Roth, Bruecker Mauspfad 448, 51109 Cologne, Germany.

The author of 1st Guide, the highly recommended multimedia hypercard program reviewed here in the Christmas issue, has moved. The new address is: Guido Vollbeding, Turmstr. 61, 06110 Halle/Saale, Germany. Send £10 to receive a registered copy of the program.

The eMailList mentioned here in the Christmas edition of EuroNews is now up to v6. Since its release this email equivalent of Yellow Pages directory of prominent Atari individuals and companies has rapidly grown in size and become international.

A must for anyone involved with Atari. Write to Achim_Wilhelm @ m4.maus.de for more information.



Ladbroke Computing



33 Ormskirk Rd,
Preston, Lancs,
PR1 2QP

Ladbroke Computing
International are one of

the longest established home computer
dealers in the U.K. We have developed an
extensive customer service policy which
involves testing of all hardware prior to
despatch to ensure that goods arrive in
working order, offering free advice and
support over the phone and keeping
customers informed. Although our prices
are not always the cheapest we do
endeavour to offer consistently good
service and backup.

All prices are correct at copy date 10/1/94
(while stocks last), and are subject to
change without prior notice. All prices
include VAT but exclude delivery.

How to Pay

You can order by mail Cheques/Postal
Orders made payable to Ladbroke
Computing. Or give your credit card details
over the phone.

Delivery

Postal delivery is available on small items
under £40 (Normally £3, phone for details).
Add £7 for courier delivery. Next working
day delivery on mainland UK subject to
stock (£20 for Saturday delivery).

Open Mon-Sat 9.30am to 5.00pm.

Ladbroke Computing Ltd trading as
Ladbroke Computing International.

Fax: (0772) 561071

Tel: 9.00am-5.30pm (5 Lines)

(0772) 203166



Star SJ144 £459
The Star SJ144 is a Colour/Mono
thermal wax transfer printer which
gives glossy colour output on
normal paper.

- 360 dpi resolution
- Emulates Epson LQ 860, IBM
Proprinter & NEC graphics

Colour Ribbon £6

Mono Ribbon £5

Star

Star LC100 Colour £149

Star LC24/100 Mono £169

Starjet SJ48 Bubblejet £210

SJ48 Sheet Feeder £55

SJ48 Ink Cartridge £19

Citizen

Citizen Swift 240 Colour £260

Citizen PRO Jet £209

Hewlett Packard

HP Deskjet 510 £309

HP Deskjet 310 £239

HP Deskjet portable £212

HP Deskjet 550 Colour £599

Hp DJ500 Colour ink cart £26

Lasers

Ricoh LP1200 £699

Add £3 for cable. Add £7
for delivery

Data Pulse Plus



The Data Pulse Plus range of
drives features a full metal case with
integral PSU ideal as a monitor stand.

All Data Pulse Plus Drives now
come configured with industry
standard 50 way SCSI Centronics
sockets which allows connection of
the ICD LINK (no clock) for use on
the ST or a SCSI II cable for use on
the Falcon etc.

To ensure the highest possible
reliability, the drives are tested at
every stage of assembly by skilled
technicians.

All drives are ready to 'Plug in and

Go' when you receive them. When
you first boot up your hard drive you
will find a wealth of Public Domain
Utilities which have been selected by
our support staff.

All Data Pulse Plus Drives include
12 months warranty and free phone
advice and support by genuine Data
Pulse Plus users.

The low power consumption of
these Autoparking Autobooting
mechanisms means that they can
operate well within their safe
operational temperature ranges
without the need for fan cooling. This
coupled with the design of the case
results in probably the quietest Hard
Drive range available for the ST.

Floptical drives are a reliable, high
density, replacement media drive for
the ST or Falcon. Due to an optical
positioning system the Floptical drive
is capable of storing 21Mb of data on
one 3.5" Floptical disk. The drive can
also read/write 720K and 1.44Mb HD
disks.

Re-Writeable Optical drives are a

"Data Pulse is astonishingly fast!"
Andrew Wright, ST User

new addition to the Datapulse range,
offering staggering density with hard
drive speed. Each 3.5" optical disk
stores 128Mb with access time of
30ms and a data transfer rate of
600K per second.

Data Pulse +52Mb	£150
Data Pulse +60Mb	£170
Data Pulse +170Mb	£280
Data Pulse +240Mb	£360
D/P +21Mb Floptical	£330
D/P +128Mb Optical	£610
Please note all prices quoted are for main drive unit only. Add ICD LINK for use with ST or SCSI cable for use with FALCON	
ICD LINK (ST)	£89.99
SCSI Cable (Falcon)	£39.99
128Mb Optical disk	£35.00
21Mb Floptical Disk	£19.99
ICD PRO Utilities	£39.99

Monitors/TV's

Dataview Mono ST £139.99

The Dataview Monochrome monitor
comes complete with our custom
designed adaptor. The adaptor
incorporates a small beeper and
also a 2.5mm output for better
sound reproduction. The monitor/
adaptor combination is fully
compatible with all ST high
resolution programmes and includes
a tilt/swivel stand.

Multisync Monitor

Microvitec 1440 £399.99

ST Switch Box £29.99

Falcon VGA adaptor £9.99

The Microvitec 1440 is a multisync
monitor compatible with both the
Atari ST and the Falcon. Utilising
the ST switch box it is possible to
display all three ST resolutions on
the same monitor. Also compatible
with screen blaster for the FALCON.

"Microvitec 1440...Highly
recommended"-Atari ST User

Dataview .28 SVGA £239.99

This high quality SVGA colour
monitor comes complete with Falcon
adaptor. The .28 dot pitch gives the
highest quality picture (Falcon will
only display 256 colours in high
resolutions).

ST-SVGA adaptor £19.99

Falcon-Composite £9.99

Falcon Scart £13.99

Falcon-ST Mon adaptor £9.99

SCART STE cable £9.99

SCART STFM cable £9.99

Scart TV's

Samsung CI5322X £249.99

The Samsung CI5322X is a 20" TV
with SCART input for high quality
display of computer output. It also
features remote control, on screen
displays, Auto tuning system
(requires SCART lead).

Samsung CI1352X £179.99

The Samsung CI1352X is a 14"
SCART input TV with remote control
and on-screen displays (requires
SCART lead).

Falcon 030

- 16MHz 32 bit 68030 Central
Processor, 16MHz Blitter, 32MHz
56001 Digital Signal Processor
 - 1.44Mb 3.5" Floppy, up to 14Mb
RAM. Displays 65536 colours from
262144 palette at 768 x 480
resolution
 - 8 Channel 16 bit, high quality. Stereo
sound sampling
- FALCON 1Mb RAM NO HD £499**
FALCON 4Mb NO HD £699
FALCON 4Mb 64Mb HD £799
FALCON 4Mb 127Mb HD £899
FALCON 4Mb 209Mb HD £999

STE Packs

- 1040 STE £199.99**
- 2Mb STE £269.99**
- 4Mb STE £329.99**

3.5" External Drive

Zydec 3.5" External Floppy drive.
Includes own external power supply.

£59.99

Speed Mouse

High quality 300 dpi mouse with
microswitched buttons ST/AM.

£11.99

Marpet Upgrades

Marpet upgrades for the ST are "plug in"
and require no soldering. They are
compatible with most motherboard
layouts and come with full fitting
instructions. These boards accept SIMM
boards and are upgradeable at a later
date. Please check that MMU and Shifter
are "socketed" before ordering.

Unpopulated Marpet Board £24.00

See SIMM prices below

- Forget Me Clock II £13.99**
- 512K SIMM'S £5.99**
- 2Mb SIMM'S £59.99**
- 4Mb SIMM'S £119.99**

Midistudio Master

240 PPO Midi Standard file format
compatible. 100 tracks. Phrase
arrangement. Very easy to use.

£9.99

Hand Scanner

- 100,200,300,400 Dpi Resolution
- 1 letter mode, 3 photo modes
- 105mm scanning head
- Includes Cartridge through port with
switch box
- Supplied with Scanlite Accessory.
Compatible with any graphics package
which supports accessories.
- Allows scanning directly into
compatible packages, such as
Silhouette.

Hand Scanner+ Scanlite £99.99

Hand scanner supplied with Silhouette
V1.4 Autotracing vector package (mono
monitor only). £119.99

Repair Services

The Only ATARI Authorised Repair Centre in the UK

Our Atari trained technicians can
repair ST's at competitive rates. We can
arrange for fully insured, courier pickup
and return delivery of your machine to
ensure its safety. We even have a same
day service which will ensure your
machine is given priority and subject to
fault, completed the same day.

We offer a Quotation service for £15
for which we will examine your machine
and report back with an exact price for
repair. If you do not wish to go ahead
with the repairs then just pay the £15.
However if you do go ahead then the
charge is included in the minimum
charge.

Please note: The minimum charge
covers labour, any extra parts are
chargeable.

Minimum repair charge	£35.25
Same day service	£15.00
STFM(E) PSU	£34.99
1Mb internal drive	£39.99
TOS 2.06 + Switch STFM	£65.00
Courier Pickup	£11.00
Courier Return	£7.00

PC Emulators

- Check configuration before
ordering
- PC Speed STFM or STE (XT) £49.99**
AT Speed STFM (8MHz) £139.99



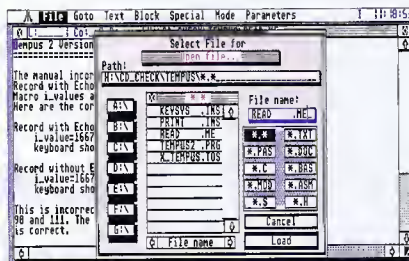
Lots of CoverDisk goodies for you this month with the Tempus 2 text editor from HiSoft and a great "hacker" game going by the curious name of Naarjek



Tempus' desktop-type environment, complete with icons, makes it a joy to use

disk

Tempus replaces the ST's less versatile file selector with its own custom version



Tempus 2

The complete and unrestricted text editor from HiSoft. Fast, feature packed and very powerful

THERE are many text editors available for the ST but few have the speed and features which Tempus 2 offers in such a small program.

Written completely in assembly language and utilising GEM to the full, Tempus 2 provides both speed and ease of use. It works both on colour or mono monitors and lets you edit up to four files simultaneously.

The size of files being edited is limited only by available memory and text lines can be 255 characters long. Full block editing features are available to make copying and pasting of selected sections of text very easy.

Other powerful features include macros, definable function keys and the ability to configure the keyboard.

Tempus 2 also includes its own custom file selector to replace the less versatile one which is offered by GEM.

The number of features which Tempus

By: HiSoft/CCD

Configuration: All STs - medium or high resolution

Filenames: X_TEMPUS.TDS - Self-extracting archive

Disk space required: 163,182 bytes

Start program with: TEMPUS2.PRQ

offers are too numerous to list here which is why the Tempus 2 manual runs to 124 pages, but, to get a more detailed description of just how good Tempus 2 is, turn to this month's Disk Tutorial pages for a basic guide to some of its features.

Tempus 2 reader offer

You can obtain the full 124-page manual and master disk for \$14.95 + £1 p&p from HiSoft. For further information on this special offer, turn to page 18.

Sound Lab

Excellent shareware sound sampler software which can be used with both ST Replay and DataSound cartridges

SOUND Lab is split into two archived files called X_SNDLB1.TOS, which is the documentation, and X_SNDLB2.TOS, which contains the program and data files.

You will need to copy them to their own separate disk and extract them from there first. You can then delete the archived files and put all the remaining files onto one disk.

Sound Lab is a brilliant shareware sound sampling program which offers lots of features for creating and manipulating sound samples in

By: Damien M Jones

Configuration: All STs - medium or high resolution

Filenames: X_SNDLB1.TOS, X_SNDLB2.TOS - Self-extracting archives

Disk space required: 214,749 (disk 1), 709,112 (disk 2)

Start program with: SOUNDLAB.TDS

varying formats.

It works with ST Replay and DataSound cartridges, which are needed in order to record samples from a sound source such as a hi-fi.

There are many functions available which will allow you to manipulate and edit samples in memory as well as record and play them.

Albion

A versatile and powerful file information utility to replace the Show Info function available from the ST's desktop

MANY of you must be familiar with some of the functions offered by the ST's desktop. One in particular, called Show Information, which is available from the File menu, allows you to alter certain attributes of a file or folder as well as view other file information such as size, date and time created.

On a standard ST, you can set a file's attribute to either Read Only, or Read/Write, and you can also rename the file from here too.

Those of you with later TOS versions, such as 1.4 or above, have the added bonus of being able to rename a folder, which is not possible

By: Carl J Hafner

Configuration: All STs - all resolutions

Filenames: X.ALBION.TOS -

Self-extracting archive

Disk space required: 136,807 bytes

Start program with: ALBION.PRQ

on STs with TOS 1.2 or earlier.

However, the later TOS versions do support other file attributes such as the Fastload and Hidden attributes. The Fastload attribute, when set, increases the speed at which the file is loaded and run.

These special attributes are not alterable from the Show Information function from the desktop, not even in the latest TOS versions, including MultiTOS.

As well as offering the features which the



Albion gives you much more information and control over various aspects of a file and its attributes

standard Show Information function does. Albion allows access to these special attributes and also includes some other useful features too.

For more information on these features, check out the documentation file which is included with the program.

Five to Five

A great utility for converting sound sample files from one format to another

THERE are many sound sampling packages both for the ST and other computers and each have their own file formats when saving sound samples to disk.

In general, the data which represents the actual sound recorded is stored much the same way in many files, the problem with being able to read a sample file in a program different to the one that the file was saved in, lies in the "header".

This header section of the file contains information on such things as the speed (or

By: Harald Schinfeld and Bernd Spellenberg

Configuration - All STs - medium

or high resolution

Filenames: X.525.TOS - Self-

extracting archive

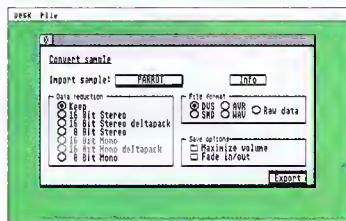
Disk space required: 104,225 bytes

Start program with: 525E.PRQ

frequency) at which the sample was recorded, whether the sound data is 8 or 16-bit and the length of the recorded sound data.

Each of the many sound sampler programs has its own way of storing this header information and some headers contain more information than others.

Five to Five enables you to load a sound sample file in one format and save it in a differ-



Various Five to Five buttons apply changes to the currently loaded sample file prior to converting it into format.

There are masses of PD disks for all computers which contain lots of sound sample files and with Five to Five, you can now convert some of them to use in your own favourite sampling package.

GoGoST

A great utility to speed up the executing or loading of programs or data

DO YOU have a drive with lots of programs or utilities stored in their own folders? Do you need a quick way to execute a specific file without having to wade through folder within nested folder to find it and then run it? Well, GoGoST is just the program you need.

This little gem (no pun intended, honest) lets you assign programs or a data file to a bank of buttons which, when clicked on, will execute the program assigned to it.

If a data file is assigned to a button - say for instance your latest assembly source code for a game - you can configure GoGoST to load the appropriate program, such as Devpac3, ready to edit the data file.

Essentially, GoGoST is a GEM based "menu" system which displays the files specified by you, ready for executing at the click of a button.

Although those of you with hard disks chock full of folders and programs will find it of most use, GoGoST can also be used on a floppy disk drive system.

By: Mark Cawthron

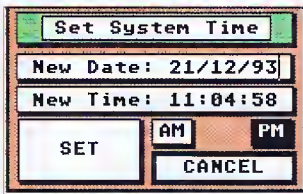
Configuration: All STs - all resolutions

Filenames: X.GOGOST.TOS - Self-

extracting archive

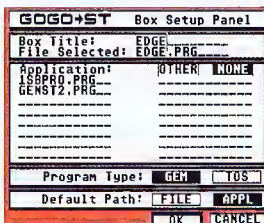
Disk space required: 159,178 bytes

Start program with: GOGOST.PRQ



You can set the current time and date which is used by the activity log feature in GoGoST

Simply click on a empty button and the Setup Panel appears where you can assign a program or data file to the specified button



CoverDisk Hotline

Hotline number: 0625 859766,
2pm to 5pm every Wednesday.

If you have any other problems with the CoverDisk, our technical editor, Darren Evans, will be available on the Atari ST User CoverDisk Hotline. Help is only available within the times specified, and no advice will be available outside these hours.

If a fault turns up...

With thousands of disks being duplicated each month, a few will inevitably be faulty. Fortunately, we can help you. Send the faulty disk to:

PC Wise, Dawlais Tap Business Park, Merthyr Tydfil, Mid Glamorgan CF48 2YY.

A replacement will be sent free of charge but please allow 28 days for delivery.

Single-sided service

Single-sided drive users wanting the contents on this month's disk on single-sided disks should send their original CoverDisk and a cheque for £1.50 - payable to Atari ST User - to SSD Service, Atari ST User, Europa House, Adlington Park, Macclesfield SK10 4NP.

Soma

A brilliant 3D puzzle game which will test your acuity powers to the limit

THIS game is based on the ancient Soma Cube puzzle in which a cube is "cut" into different shapes that you must re-assemble into a complete cube.

The game is completely mouse driven and is very easy to use. Simply choose one of the seven cube pieces displayed at the top of the screen and then click on the down arrow to transfer it to the hexagon on the left.

You can then rotate the cube piece in 3D by clicking on the small cube in the top left with the mouse button. To position a piece, click on

By: Mark J Gallagher
Configuration: All ST/STes - low resolution
Filenames: X_SOMA.TOS - self-extracting archive
Disk space required: 34,915 bytes
Start program with: SOMA.PRQ

the direction arrows with the mouse button.

Once you are satisfied with the piece's current position and orientation, click on the arrow at the bottom of the screen to transfer it to the right hexagon which is where the cube is to be assembled.

Should you make a total cock-up, you can remove the offending piece or pieces by selecting its shape and clicking on the up arrow.



Mind-taxing spatial awareness is required if you are to successfully complete a cube

Never Ending Colouring Book

A colouring book program for the young 'uns. Lots of fun and very easy to use

THIS one is for the youngsters and is a simple colouring book program which allows kids to use the mouse to colour in a selection of ten pre-drawn pictures.

There are also ten blank workscreens for you to create your own pictures for the youngster to colour in.

The program also plays a different piece of music every time the program is loaded, which can be turned on or off as required.



A simple and easy to use mouse interface ensures the youngster will soon get to grips with this fun program

By: Tony Greenwood, Tony Gooding and Mad Max
Configuration: All STs - low resolution
Filenames: X_COLOUR.TOS - Self-extracting archive
Disk space required: 248,301 bytes
Start program with: COLOUR.PRQ



Once a colour is chosen, simply click on the paintbrush icon and begin colouring in to your hearts content

Naarjek IV

Use your computer skills to hack into a network controlled by Naarjek - an artificial intelligence

THIS is a game in which you must access a computer network and hack your way into the heart of the system.

Those of you familiar with modems and logging on to bulletin boards and other related services will feel at home as the game simulates being logged on to an online service.

Various menus are available, by pressing the appropriate number or typing in the appropriate word. There are also many hidden menus and commands which you must find for yourself.

The first thing you should do is read the

By: Carl J Hafner
Configuration: All STs - medium resolution
Filenames: X_NARJEK.LZH - Self-extracting archive
Disk space required: 179,967 bytes
Start program with: NAARJEK4.PRQ in NAARJEK4 folder

NAARJEK4.TXT documentation file which has some useful background information on Naarjek Data systems.

There is not a great deal of information to help you, instead, you must use all your logic and intellect to hack the system.

It is quite a difficult game and some of us in the office are completely stumped at how you access your personal File area in the game.

Using the CoverDisk

Write-protect your CoverDisk now by sliding the write-protect tab so you can see through the hole at the top right corner of the CoverDisk.

In order to fill the disk with as many programs as possible, ST User employs disk compression techniques when placing large programs on the CoverDisk.

These files are termed "archived files" and cannot be directly executed from the CoverDisk. Archived files are identified by their names beginning with X_.

Any files that do not begin with X_ are actually folders containing files which are not compressed.

These uncompressed files should also be copied to a blank disk. Following are a series of step-by-step instructions for using the CoverDisk.

Important: The ST User CoverDisk uses an extended format of 10 sectors and 81 tracks to increase storage space. This means you will not be able to copy the disk using the ST's built-in copying feature.

To make a backup of the CoverDisk, you will need a copying utility, such as FastCopy 3. Such utilities are available from all good PO libraries.

Alternatively, you may use a formatting utility, to format a disk to the same 10 sector, 82 track specification as the CoverDisk and simply copy all files to this.

Using archived files

Note: When copying files, the ST refers to disk A and disk B in its on-screen instructions. Disk A refers to the disk being copied while disk B refers to the disk being copied to (usually a pre-formatted blank disk).

1. Format a disk.
2. Copy the required archived file to the formatted disk.
3. Run the copied archived file. It will now automatically "extract" to its full size.
4. Once complete, delete the X_ filename as this is no longer required. The formatted disk should now contain all the files that were in the archive file.

Normal uncompressed files

1. Format a blank disk
2. Open the required folder and copy all files in the folder to the formatted disk.
3. You can now immediately run the program/s as is.

Highlighting and dragging files and icons

1. Click once on the item, it should turn black (the item is now highlighted).
2. If you keep the left mouse button held down on the item, a dotted outline of the item appears and you may then re-position it by moving the mouse to the required position (effectively dragging the icon) and releasing the mouse button.
- If you are new to the ST and did not understand some of the terminology in the preceding steps, there now follow an explanation of some basic techniques needed.

Formatting a disk

1. Place the disk to be formatted in the drive.
2. Highlight the drive A icon.
3. Move mouse pointer up to the FILE menu at the top of the screen and select FORMAT.
4. A box will appear. Click on OK.
5. Another box will appear, Ensure DOUBLE SIDED is selected then click on OK. The disk is now being formatted.

Copying files to another disk

1. Select the file to be copied by highlighting it and dragging it to the disk B icon.
2. A box entitled COPY FILE(s) appears. Click on OK and follow instructions on the screen exchanging disks as requested.

Protext 6 - A Winning Performance



Some highlights of Protext 6

Styles

Styles let you make flexible use of printer fonts and effects. You can change a font throughout a document with a single operation.

Document Layout

An easy to use dialogue lets you lay out your page precisely as you want using inches or cm for the page length, margins and tabs.

Graphics

Graphic images may be imported into a Protext document. Supports IMG, PCX, GIF and IFF. You can select any resolution and scale the image. Dot matrix, inkjet and laser printers.

Printers

Protext's unrivalled understanding of printers gives you the highest quality printing at the highest possible speed. Using a printer's built in fonts enables Protext to print pages in seconds rather than the minutes taken by some programs.

Protext is still the fastest

- Fastest at editing.
- Fastest at spell checking.
- Fastest at printing.

Protext still has the best printer support

- Hundreds of printers supported
- PostScript driver included **NEW**
- Scalable font support **NEW**
 - Colour printing **NEW**
- Automatic line spacing **NEW**

Protext still has the most advanced features including:

- Styles **NEW**
- Graphics import **NEW**
- Spelling checker
 - Thesaurus
 - Hyphenation
- Document analysis
 - Glossary **NEW**
 - Footnotes
- Widows and orphans
- Index and contents
- Addition of numbers
 - File sorting
 - Mail merge
- Programming language

Protext is now easier than ever to use

- Menus and dialogue boxes
 - Interactive Help **NEW**
 - Macro editor **NEW**
 - Dictionary editor **NEW**

The list price of Protext 6 is £152.75 but you can order direct today for just **£99** inclusive. For the Atari ST and TT. Phone us today and we will send you a usable demo version and a full specification, absolutely free. Upgrade offers available - please call us for the current price.



ARNOR

If you haven't yet extracted Tempus 2 from the CoverDisk, do it now.

Those of you unfamiliar with archived files should read the disk pages and the section in this tutorial on using the CoverDisk.

Text editors are some of the most common, and most useful, programs around. Not only can they create documents for printing out, they are also used by many programmers as a means for writing programs.

They differ from the many word processors available in that they take up very little memory and they do not have a spelling checker or thesaurus.

Tempus 2 differs from other text editors in that for such a small program (a mere 70k), it offers many features and functions usually only found in word processors.

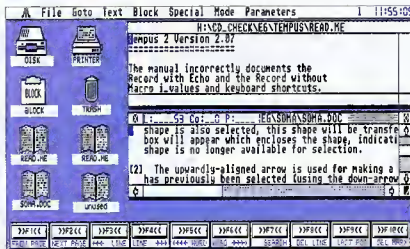
Features such as multiple document editing, macros and extended editing functions, cross reference generation and file comparison are just a few of those available.

Programmers in particular will also find useful features which will aid editing of program source data with Tempus's ability to check for structured source code. C programmers can check for balanced { and } characters (a common source of compiler errors) and Pascal programmers can check for balanced BEGIN and END statements.

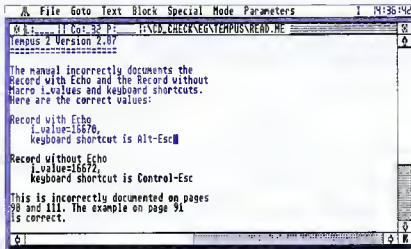
There is even a built-in programmer's calculator offering basic arithmetic functions such as multiply and addition as well as Boolean functions such as NOT, OR, XOR and others, all in hex, decimal, binary or octal bases.

Besides being very small in size, Tempus 2 is also extremely fast. This is because it's written entirely in assembler.

If you haven't already got Tempus 2 up and running, do so now by double clicking on the TEMPUS2.PRG file.



Tempus uses its own desktop like display and allows up to four document windows to be open at once



Block functions allow text to be selected, then copied to other documents, or saved to disk

Kickin' up a

Get familiar with the basic features of this month's CoverDisk giveaway, with our informative tutorial

The first thing you should be presented with is Tempus's custom file selector, which is a vast improvement on the ST's built-in one. As you can see, unlike the ST's file selector, you can change drives simply by clicking on the appropriate drive boxes to the left.

Also, there are a selection of buttons representing standard file extension names, which can be customised to your tastes.

At this point, locate the text file READ.ME and load it into Tempus by either double clicking on the file name, or by clicking on the file name once and clicking on the Load button. The contents of the READ.ME text file should now be displayed in a window.

The window covers the entire screen, but you can alter the size and position of this window as you see fit. Move the mouse pointer to the bottom right-hand corner box of the window.

Press the left-hand mouse button and keep it held down. Now, if you move the mouse, you will see a dashed outline of the window being drawn as you move around.

Make the window as small as



possible and release the left mouse button. You should see the window has been re-drawn to its new, smaller size.

Next, move the mouse pointer to the top horizontal bar of the window, between the top right and left-hand boxes. It's the one where the path name and the name of the file being edited is displayed.

If you press the left mouse button and keep it held down while moving the mouse, you should be able to re-position the window to anywhere on screen. Move the window so it is at the top right-hand side of the screen.

As you can see, Tempus has its own desktop-like display with icons representing the maximum of four files which can be open at once, as well as other icons for printer, trash and block functions.

Take a look at the four text page icons and you will see that three of them are unused, while one of them contains the name READ.ME. This shows that the file READ.ME is currently resident in memory.

Move the mouse pointer to the top right box of the text window currently open and click the left mouse button. This will close the window.

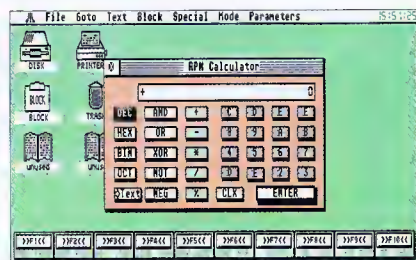
As you can see, although the text window is gone, the text page icon still shows that the file READ.ME is still in memory. This feature means you can

have up to four separate text files in memory with each of them assigned to their own icon.

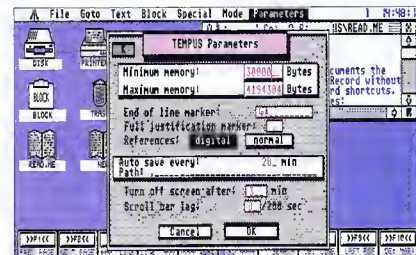
If you wanted to print, clear or save the READ.ME document, you could do it by selecting the appropriate print, clear or save command from the menu at the top of the screen.

However, as you can see, there are other icons on the screen besides the text page ones.

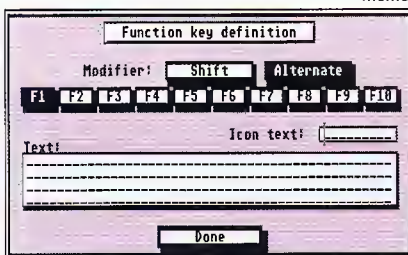
Ignoring the block icon for now, you will see a disk, printer



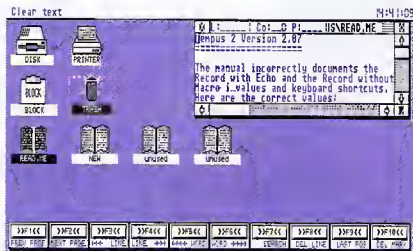
Tempus includes a useful built-in calculator for the programmers among you



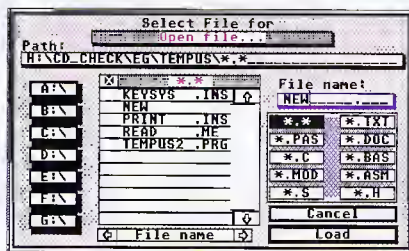
Various parameters allow you to switch on auto saving, alter memory usage and configure the built-in screen saver



Tempus 2 also allows you to assign text strings to the ten function keys



Using icons allows quick and intuitive printing, saving or clearing of text



Tempus does away with the ST's limited file selector and replaces it with its own custom version

Tempus

and trashcan icon. If you wanted to clear the READ.ME file from memory, you can simply drag the READ.ME text page icon to the trashcan icon.

Alternatively, if you wanted to print out the READ.ME file, you would drag the READ.ME icon over to the printer icon. This icon method of doing things is obviously much quicker than having to access the menu and the appropriate sub-menu function.

You can have all text files open at the same time, each within its own window. However, things will get a little cluttered unless you are running Tempus on a high resolution monitor, or if you have a graphics card which provides enhanced resolutions.

This makes for some powerful multiple document editing with the ability to cut

and paste between each document. To show how easy it is to copy text from one document to another, let's create another document.

Move the mouse pointer to the File menu and select Open file.

Locate the File name box and if it contains any text, erase it by pressing the Esc key.

Now type the word NEW into the box and press Return. Tempus will realise that this file does not exist and will ask if you wish to create it. Select the Yes box.

Next, open the READ.ME text file (which should still be in memory) by double clicking on the text page icon marked READ.ME. Now position both the NEW document and READ.ME document windows so that you can see both windows at once.

Click on the READ.ME document window and position the cursor at the top of the document using the mouse.

Now move the mouse pointer to the block menu and select Set block start.

the mouse pointer to the empty NEW document window and position the cursor at the top of the document using the mouse.

If you now move the mouse pointer to the Block menu and select Copy without markers, the text which is selected in the previous window is copied to the window at the current position of the text cursor.

Whenever you mark any text using the Set block commands, the specified text is copied into a buffer. This buffer has its own icon on Tempus's desktop called (spookily enough) Block.

As with the text page icons representing actual documents, the contents of the block buffer can be printed, saved or cleared by dragging them to the appropriate icons or by accessing the menu functions.

As you can see, using Tempus is both intuitive and fast. There are many, many more features available which are covered in a 124-page manual.

This manual is available from HiSoft for the bargain price of £14.95 + £1 p.p. For information on how to order, turn to page 18.

Using the CoverDisk - An insider's guide

A quick discussion on the format of our CoverDisk will be of benefit to the many newcomers to the ST who, according to the number of calls we receive on our CoverDisk hotline, seem to be suffering from common problems when trying to extract the CoverDisk files.

To give the maximum value for money we can, Atari ST User uses self-extracting archived files before putting them on the CoverDisk.

This archiving process takes all the files which comprise a particular software package and, using a special technique, reduces the size of each file (known as compression). It then stores all files in one single file, known as the archive file.

Because a program has been compressed and all files stored into a single file, we can fit many more programs onto the CoverDisk than we could have done normally.

For example, this month's collection of files, if stored on a disk without being archived, would require almost 1.4Mb (1,377,513 bytes to be exact) of disk space, which would mean a double disk issue with a subsequent increase in the magazine price.

After archiving these files, we can reduce the space required to a mere 662,225 bytes, which can fit onto a standard double sided ST disk of 726,016 bytes.

The price of this drastic space saving is that any archived files on the CoverDisk must first be extracted before you can use the programs.

This extraction process involves copying the required archived file from the CoverDisk to another disk and then running the program from it.

Judging from the calls we receive on the CoverDisk hotline, many newcomers are trying to run archived files directly from the CoverDisk, which will most probably result in a Write error.

You should write protect the CoverDisk immediately after removing it from its plastic bag on the front of the mag, and then treat it simply as the master disk for the stored programs on there. In fact, you should ideally make a copy of the CoverDisk as backup and put

the original CoverDisk in a safe place.

To use a particular program on the CoverDisk, you must ideally copy the related file (refer to the disk pages for the name of the related file) to a blank formatted disk and then run it from there.

This will start the extraction process and all the files which are stored in the archived file will be copied onto the disk along with the archived file.

If you look at the description of the CoverDisk files in the disk pages, you will notice a few changes over previous issues. In particular, new information on the disk space required for an archived file to successfully extract is present, allowing you to calculate whether you can put more than one archived file on a disk to extract them.

As an example, the description of Tempus 2 in the disk pages tells you that the disk space required for Tempus 2 to extract is 163,182. So, this amount of space must be available on the disk you copy the file to.

Once copied you may then run the archived file, at which point the extraction process will begin.

A series of asterisks (the * character) will appear, showing the progress for each file. A successful extraction should end with the message "Press any key".

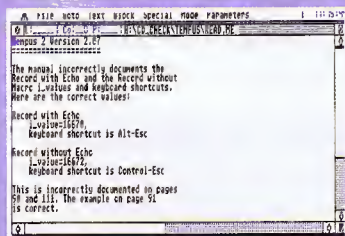
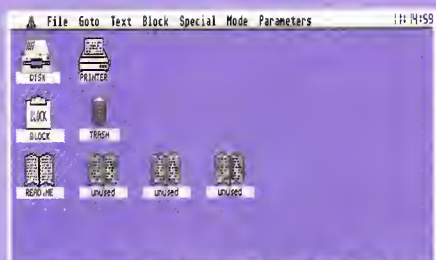
Pressing any key returns you to the desktop. You will need to re-read the disk with the archived file in order to see the new files which have appeared. Press the Esc key or simply double click again on the disk A: icon.

At this point, you can delete the archived file as it is no longer required and is just taking up disk space. All CoverDisk archived files begin with the letter X, as in X_TEMPUS.TOS, to make them easy to spot amongst other files.

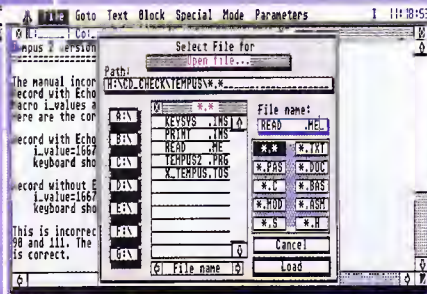
Then, simply refer to the disk pages for the name of the file which starts the CoverDisk program, in the case of Tempus, this file is specified as TEMPUS2.PRG, and then run it.

Trade up to the Tempus 2 complete package

and pick up a Power BASIC bargain as well...



The Tempus 2 complete package includes the 124 page manual, the master disk plus full registration details, and costs just £14.95 plus £1 postage and packing. This great offer also includes full details of the new (1.2) version of Tempus 2 which supports large screens, the TT and the Falcon, together with a special offer for upgrading to this new version.



Included with this offer for the premier programmer's editor is an opportunity to pick up Power BASIC, the acclaimed compiler for FirST BASIC which is supplied with most STs.

The Power BASIC package allows you to turn you FirST BASIC programs into super fast machine code quickly and easily, and comes with an extensive manual and registration details for only £10 plus £2 postage and packing.

Don't forget that FirST BASIC is not required in order to use Power BASIC – it is a standalone package in its own right, making it even more fantastic value!

ORDER FORM

Please send me...

- ☐ The Tempus 2 complete package at £14.95 plus £1 p&p
- ☐ Power BASIC at £10 plus £2 p&p

Send my order to...

Name (Mr/Mrs./Miss/Ms).....

Address.....

Postcode.....Daytime phone.....

- ☐ Tick this box if you do not wish to receive promotional material from other companies

I wish to pay by...

- ☐ Cheque/postal order payable to HiSoft.
- ☐ Credit card

Expiry date ____/____/____

Card No.

ATARI
ST USER

To order either of these great products send this order form to HiSoft, The Old School, Greenfield, Bedford, MK45 5DE. This offer ends on March 31

Analogic Computers (U.K.) Ltd

Unit 6, Ashway Centre,

Elm Crescent,

Kingston-Upon-Thames, Surrey KT2 6HH

Mon-Fri. 9am to 6.30pm Sat 9am to 5pm

TEL: 081-546-9575

FAX/TEL: 081-541-4671

ANALOGIC
ANALOGIC
ANALOGIC

OFFICIAL ATARI REPAIR CENTRE

• COMPUTERS • MONITORS • REPAIRS WITHOUT DIAGNOSTIC FEES

520/1040 ST/STM/STF/STFM/STE	£59.95	} including delivery back by courier service
Monochrome, Colour Monitors excluding CRT, L.O.P.T.	£59.95	

★ We pick up computers for repairs and memory upgrades for Next Day delivery to us by Courier Service for only £5.00 + VAT

MEMORY UPGRADES

MARPET DEVELOPMENTS OFFICIAL XTRA-RAM DELUXE INSTALLERS

520 STF/STFM to 1 Meg	* £59.95	520 STE to 1 Meg	* £17.95
520 ST/STM/STF/STFM to 2.5 Meg	* £89.95	520 STE to 2 Meg	* £59.95
520 ST/STM/STF/STFM to 4 Meg	* £139.95	520 STE to 4 Meg	* £114.95

***FREE
FITTING**

NEW PROTAR PROFILE SERIES II HARD DRIVES

QUANTUM/MAXTOR MECHANISM WITH CACHE

Compatible with all ST/STF/STFM/STE/Mega ST/Mega STE/Falcon

Profile 50DC	£249.95	Profile 170DC	£369.95
Profile 120DC	£319.95	Profile 240DC	£479.95

● POA for Higher Range of Profile Series II and SCSI Bare Drive

SCSI BARE QUANTUM HARD DRIVES

WITH CACHE

50Mb	£129.95	170Mb	£269.95
120 (Maxtor) Mb	£199.95	240Mb	£349.95

STFM, STE, FALCON 030 COMPUTERS

1040 STE Family Curriculum Pack II

1040 STE Music Pack

Falcon 030 with or without Hard Drive

NEW VERY LOW PRICES

P.O.A.

STE TOS-SWITCHER

with Hardware Switch

Solderless DIY Kit

STE TOS SWITCHER...£29.95 STE TOS ROMS...£39.95

STE TOS SWITCHER + 2.06 ROMS...£69.95

NEW STFM TOS-SWITCHER

with Hardware Switch

Solderless DIY Kit

£79.95

including 2.06 ROMS

MONITORS

AMITAR

£129.95

High Resolution Monochrome Monitor

including VAT
excluding delivery

Philips CM8833 Mk IIPOA

POWER SUPPLIES

STFM/STE Power Supplies (Service Exchange).....£28.95

NEW STFM/STE Power supplies with ONE YEAR WARRANTY.....£49.95

ACCESSORIES and EMULATORS

STE/STFM Scart Lead	£14.95	10 Blank Sony Discs	£9.95
STE/STFM Lead to Philips CM8833 I/E	£14.95	10 Blank Unbranded Disks	£5.95
Philips CM8833 Dust Cover	£6.95	Forget Me Clock	£21.95
Twin Joystick/Mouse Port ext Lead	£5.95	PC Speed	£59.95
Squik Mouse	£14.95	AT Speed 8	£134.95
Dust Cover	£4.95	AT Speed C16	£199.95
Mouse Mat	£4.95		

DISK DRIVES

1 Meg 3.5" Internal Drive	£44.95
High Density 3.5" Internal Drive	£54.95
High Density 3.5" Internal Drive + Module	£79.95

PRINTERS - HP510 £299.95 - HP550 Colour £549.95



- All prices include VAT and **NEXT DAY DELIVERY** subject to availability
- Fixed charge for repair does not include Disk Drive Replacement & Keyboard
- All prices subject to change without notice
- We reserve the right to refuse any ST Repair
- Please allow 5 working days for cheque clearance



GUARANTEED SAME DAY DISPATCH (subject to availability)

£249.95
PROTAR PROFILE SERIES II 50DC HARD DRIVE
compatible with complete ST Range and FALCON

SPECIAL OFFER
FOR A LIMITED PERIOD

Professional Service with no surcharge

WHILE-U-WAIT!!

MEMORY UPGRADES ♦ TOS UPGRADES ♦ DISK DRIVE UPGRADES ♦ EMULATORS ♦ ACCELERATORS ♦ many REPAIRS



L.A.P.D.

QUALITY P.D. FOR ATARI COMPUTERS (ST/STE/FALCON)



★ PD disks: £1.50 each ★

★ HD Falcon disks £1.75 ★

★ BUDGET RANGE PD DISKS ONLY £1.00 ★

★ Licenceware disks from £2.50 to £5.00 ★

★ Commercial Games PD disks from only £2.99 ★

★ Same day service, quality virus free disks ★

★ PLEASE ADD 50P P&P ON ORDERS UNDER £5.00 ★

★ Overseas customers (outside Europe) please add 50p per disk ★

FALCON SOFTWARE

A FULL RANGE OF SOFTWARE FOR THE ATARI FALCON COMPUTER IS NOW

AVAILABLE ON HD DISKS, INCLUDING:

HD.32 NETHACK: Huge fantasy role playing game, 2Mo+ (£1.75).

HD.10 POV RAYTRACE: The best raytrace program around. Unzips to 3 x HD disks (£1.75).

HD.9 JPEG COLOUR PICTURES: True colour pictures (£1.75 per disk).

HD.12 JAPAN: Photo quality slide show of XGA pictures (2 disks/£3.50).

HD.10 HUMANS: Demo of the commercial game (2 disks/£3.50).

HD.2 UTILITIES: Includes programs to run STE/STFM programs. (£1.75).

HD.12 MAINLY MUSIC: Includes Desktraker, Pro-Tracker, Star Player, etc. (£1.75).

HD.12 MORE MUSIC: Includes Vintex, a direct to disk recording system (£1.75).

Our full range of software for the ST/STE is currently undergoing

compatibility testing for the Falcon. If you are considering any title from our

ST range contact us and we'll let you know if it's compatible.

(Ask for our FREE Falcon catalogue)

All disks below: £1.50 unless otherwise stated

★ BUY 11 OR MORE £1.50 DISKS FOR ONLY £1.25 EACH! ★

GAMES

ARCADE

G.342 Upshot: Two play role and thrust 'Grav' type combat game

G.333 SUPER PSYCHO KART: High speed platform game to rescue piglets (1Mb SW)

G.316 H.M.E.C. 2: Sequel to the tremendously popular H.M.E.C. (1Mb STE or Falcon)

G.314 IT'S A MUGS GAME: Fun one or two player boxing game.

G.302 REBOUND: A ball & ball game requiring determination, stamina and patience

G.293 H.M.E.C. The ultimate Pac-Man? (1Mb, STE only)

G.292 CASTLE CAPERS: Superb platform arcade action across 10 screens (1Mb).

G.285 KUBES: Filling block game with a novel twist.

G.286 ROCKFALL SPECIAL EDITION: Tunneling/diamond collecting puzzle game

G.281 PSYCHO PIG: Platform game 'em up' with Rambo-esque pig (2 disks, £3).

G.279 OPERATION GARFIELD: 'Frenetic' 'Operation Wolf' type shoot 'em up action. (STE).

G.268 MEGALINE: 1Mb 'Trot' light cycles game for 1-4 players. (STE only)

G.260 CYBERNETICS: Good, challenging 'Defender' type arcade game. SW.

G.250 TETRIS & PLE: Two very good versions of the 'Tetris' arcade game

G.171 HAZARD: 1:1 megabyte version of 'Pezman, 100 new levels

G.221 GRAV 2: Follow up to highly praised 'Olds' type robot and thrust arcade game.

G.110 LAMATRON: 100 levels of fast arcade action with wicked sound FX. (SW)

G.144 REVENGE OF THE MUTANT CAMELS: More fast arcade action. Jeff Miller mayhem (SW)

G.150 COLUMNS: An impressive relative of the Tetris tumbling block game. (1Mb).

G.201 BLAT: Tetris style three in a row, falling blocks with many added features.

G.239 BLOX: An excellent variation on the falling block, Tetris, theme.

FANTASY ROLE PLAY

G.334 BLUDGEON: Solo fantasy adventure using the Bludgeon combat system (SW)

G.268 DARTKLYTE: Space Crusader type droids wargame.

G.284 BO-HAZARD: Two levels of brilliant 'Bo's Dungeonmaster' style game. SW.

G.197 DUNGEON LORD: 3 levels of 'Dungeonmaster' type adventure from the States. 1Mb.

G.282 ALIENS: Space Marines v. Aliens strategy combat game.

G.198 OMEGA: A large and complete wilderness and dungeon exploration game. 1Mb.

G.115 MYSTIC WELLS: Complete 'Dungeonmaster' style adventure game.

G.200 WALLS OF ILLUSION: The ultimate 'Dungeonmaster' clone... but it's in German. A knowledge of the language is a distinct advantage but not compulsory.

PUZZLE

G.341 FSTFUL OF PROGRAMS: Half a dozen assorted games from Dunces Cap Software.

G.340 ZIGGY: The latest puzzle game from Nite Bytes. (SW)

G.323 SPOT IT: An electronic version of the Spot the Difference puzzle.

G.316 BRAIN DRAINER: Multi-choice puzzle game. 15 stages in 8 games

G.258 SKULLS: Addictive up to date reworking of Landmines/Minesfield (1Mb STE).

G.306 LOGIC PROBLEMS 11: Three more logic problems from Ben Weston.

G.310 DOMINICS: Playable demo version of a domino playing program.

G.311 JIGSAW: A computerised jigsaw puzzle. (1Mb).

G.294 ROLL-IT: Challenging German rolling ball puzzle game. (1Mb).

G.280 COLOR CLASH: Adventure/Match game with puzzles by Animalsoft. SW

G.269 QUIZZMASTER: Multi-choice trivia game: general knowledge quiz. (STE only)

G.258 QUIZZMASTER: Multi-choice trivia game: general knowledge quiz. (STE only)

G.258 QUIZZMASTER: Multi-choice trivia game: general knowledge quiz. (STE only)

ADVENTURES

G.321 INVESTIGATION (2 disks/£3.00): Gopher adventure in the style of Sierra On Line.

G.200 ANARCHY ACADEMY: 30 adventure to blow up the school!

G.140 A NIGHT ON THE TOWN: An adventure with the opportunity to meet the girl of your dreams and ... well, the rest is up to you.

G.222 GRANTED AND THE QUEST... 30 graphic adventure by Ian Scott. Shareware (1Mb).

G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: Sequel to 'Quest for the Vein' (1Mb 2 disks/£3.00).

G.215 BLACK DANGER: The Earth is under threat (again) and it's up to you to save it.

G.99 DRAGON SLAYER: Can you, a lowly beggar, gain riches by slaying the dragon.

G.156 THE AVE CHASM: An adult adventure featuring Snatch and Crunch (over 18's only).

G.167 SUSAN: An adult adventure (over 18's only).

G.91 QUEST FOR THE HOLY GRAIL: Pyrotechnic madcap humour.

G.163 ALICE: Take a trip through the looking glass.

G.202 UNKUKUJAN UNDERWORLD: Highly rated large scale tale fantasy adventure.

STRATEGY & OTHERS

G.344 CHESS MATE: A Chess/Draughts playing program cum analyst tool. SW.

G.332 CAESAR: Strategy game set around the Mediterranean in 200BC.

G.330 GNU CHESS: French chess playing program for all levels.

G.329 PEGASUS: A massive space strategy game. Seek out and colonise planets. (1Mb 2 disks/£3.00).

G.131 STAR TREK - THE GAME: Defeat the Klingon threat to the galaxy. (1Mb).

G.299 IMPERIAL: Shareware demo version of a detailed 'STAR TREK' type game.

G.287 THE COURSE ANGLER: Angling simulation game. (1Mb).

G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or 2 disks).

G.324 IMPERIAL CONQUEST: Complex ancient Mediterranean game of conquest (SW).

G.325 SOCCER MANAGEMENT: A complex simulation of soccer management (SW).

G.290 SOFTWARE PROJECTS: Manage a software house in this business sim.

G.277 THE MAZE: 30 adventure game loosely based on 'The Crystal Maze'.

G.173 PENGUINS: Move your penguins around the screen 'Lemming' fashion.

G.110 VEGAS: Roulette, poker, blackjack and slots... without the Nevada state!

G.124 COMPANY: Business simulation that puts you at the head of a corporation.

G.124 SPECTRAL SORCERY: An excellent spellcasting game of battling wizards.

G.147 THE MANAGER: Manage a top football team through a tough season. (SW).

G.152 TAIPAN: A trading game set around the Orient. (1Mb).

LICENCEWARE/GAMES

L.60 BIO-HAZARD: Full version of the sci fi 'Dungeonmaster' clone (1Mb, £3.00).

L.64 STORM: Aliens meets Gauntlet for superb blasting action. A must have for all arcade fans. (£3.00).

L.72 STORM: As above... now available for 1Mb STE/MS (cost £3.00).

L.66 HEARTBREAK: Highly addictive shape placing game. (£3.00).

L.67 LOGIC PROBLEMS III: Ben Weston's back with more challenging puzzles (£3.00).

L.22 GRAND PRIZM MANAGER: Grand Prix management simulation. Employ drivers, mechanics, etc. Test cars, then race in a full grand prix season (2 disks/£4.00).

L.31 THE CURSE OF AZRIEL: Fantasy trading/adventure game (2 disks/£4.00).

L.60 CONQUEST: A God game in the style of 'Populous' (£3.00).

L.19 THEY SOLD A FEW: Three games from Ben Weston. Logic Problems, Wild West Shoot Out and Olds. A Kingdom game. (£2.50).

L.58 NICE BYTES II: Gondard, a word game & Rega, a tile flipping game (£2.50).

L.50 DEMONIC: Fantasy game with 3D view, monsters, magic, teleports, traps, spells, etc. (£3.00).

L.51 POWER CUT: Arcade action from Powerpat in a subterranean context. (£3.00).

L.52 ENERGETIX: Puzzle game from Nite Bytes. Save the nuclear reactor (£3.00).

L.48 DELUXE NOSTRAM (1Mb): Arcade platform action through 70 rooms.

L.55 HUNCH-Y 1066: Arcade action with the Hunchback, multi-levels, traps, puzzles, etc. (£3.00).

L.41 MURDER ON THE ORION EXPRESS: Murder solver game set on an interstellar courier. (£3.00).

L.21 DEAD OR ALIVE ...?: Large, complex and challenging text adventure. (£3.00).

L.11 PI SQUARED: Challenging puzzle game with increasing difficulty levels (£3.00).

L.33 QUEST KNIGHT: Fantasy quest for the Rose of Question. (£2.50).

L.42 OUTWORLD: Take control of a space colony 'Dungeonmaster' style game. (£2.50).

L.53 HOT DOG: Greyhound racing and betting game for 1 to 9 players. (£2.50).

L.38 MARIO'S QUEST: Cute platform game to rescue the princess. (£2.50).

FOOTBALL TACTICIAN 2

(1Mb) - £22.95

The ultimate football management game!

1 to 48 manager/player capability. 900 players accurately named with real ages, aptitudes, skills, playing positions, caps and market valuations. 68 League referees with true to life behaviour, built in intuitive team editor, intelligent behaviour of computer controlled sides, etc., etc.

If you think you could survive in the premier league or division one this program will test you to the limit!

DEMOS

D.375 BRUTAL TECHNO: Techno rap with dancing lessons from Adrenalin.

D.371 TRAXION IN THE NET BET: A burning demo by Adrenalin. (2 disks/£3.00) (Mb).

D.373 DREAMS: Demo by Animal Mine of Holland.

D.372 REALITY IS A LIE: Good first demo from Psychonoxia. (1Mb).

D.374 BURNING LUSIGN: Sequentially running demo by DNT.

D.367 EXTREME RAGE: Garreus, Shadowbox, etc. from Awareness of Sweden (1Mb STE).

D.363 GROTOSCOPE: Psychobabble techno music demo. (1Mb, STE).

D.368 EPISODE OF FREY: Intro to the commercial game that never made it to the ST (1Mb STE).

D.360 DREAMZONE: Mega demo from the Wild Boys (2 disks, £3.00).

D.347 COSMIC JAM: Good multi-vector demo from Imagina of Finland D.S.

D.324 CROSSBONES: ST demo (also known as RED SECTOR) demo.

D.287 HARDCORE DANCEFLOOR: Sampled music from The Wild Boys. D/S

D.323 SLAM - HARDCORE DANCEFLOOR II - More house music from The Wild Boys.

D.304 DIGITAL EXTASY: Mega-demo by TTK.

D.332 MENTAL HANGOVER: Scopy demo converted from Amiga. (STE).

D.306 TOM & JERRY: Animated cat and mouse cartoon sequence.

D.291 LOST IN THE MOUNTAINS: Demo from the Rendigons.

D.226 ELECTRA: The biggest real demo ever.

MUSIC

S.147 OMEGA II: Collection of files for DR. T's music software.

S.141 YAMAHAS PSS: Patch editor and facility to port tabular music.

S.144 EKSEPO: 1 a rack, 24000p sequencer with many features.

S.145 OPEN/OUT MUSIC: Rip and play music from other programs.

S.8 NOISEPACKER: Soundtracker .mod player with eight starter tunes.

S.141 REAL TIME MIDI ANALYSER: Indicates MOD event occurrence.

S.73 BAD STARS SAMPLES II: Over 80 .SMP samples for use with NoiseMaker.

S.85 HIGH FIDELITY DREAMS: 8 super pieces of music from Auto.

S.87 IMAGE FACTORY DIGI SYNTH 1: Ripped mode with 'Lemmings' menu.

S.85 LONE WOLF SAMPLES: Voice and instrument samples for the TCB Tracker.

S.70 MAD MAX CHIP MUSIC: 35 pieces of sound chip music from Med Max.

S.7 ACCOMPANIST: 16 Voice Henry Coon sequencer (full instructions on disk).

S.19 ALCHIME JR.: Impressive Swiss multi-windows, multi-task sequencer. (1Mb).

S.13 TCB TRACKER PLAYER: Display your own picture whilst playing Tracker .MODs.

S.117 RIPPED MUSIC: Over 50 pieces of interrupt driven music.

S.54 SOUNDRACKER: Player for .MOD files with ST & STE versions.

MOD FILES

S.41 AUDIO WIZARDRY #1: Apology, Imagination Flight, Outrun, Megamax, Titan.

S.56 MOD FILES: Axiolod, Follow, Dreaming, Jackson, Radio & The Edge.

S.9c HAYNES WOODS V.I. Eugene, Bob Hill, Michael, Radio, Soundwaves C & C (1Mb).

S.104 PRITCHETT MODS: Altwil, Barock, Galsight, Jackin', Legacy, Pyrax.

S.132 SL MOD COMP #7: Benny Hill, Bruno, Humenoid, IMF, Technonite Insp. etc.

Many, many more available, see our catalogue for details

UTILITIES

U.66 BEFORE DAWN: Animated screen saver that will use your own animation.

U.65 HARD DISK UTILS: A collection of useful programs for hard disk owners.

U.62 MENU CRAWLER: Replace a picture in almost any menu/demo/game intro.

U.60 ST TOOLS: An exhaustive collection of Atari ST utilities, including MMNT.

U.53 FASTCOPY 3: Excellent disk copier for cover disks.

U.53 TEPADISK (1Mb): Replacement desktop for the ST/STE. (1Mb).

U.48 PREMIER PACKERS: 13 of the best program packers, plus a de-packer. D/S

U.42 PICTURE HUNTER: Flips picture screens from other programs.

U.47 THE DUPLICATOR: High speed copier.

U.47 PROBE ST: Handy utility. Grabs multi-graphics, disk/memory editor, etc.

U.35 PICTURE CONVERTERS: Convert any format to just about any other format.

U.34 SACROGAT: Super virus killer to protect your disk collection.

U.52 VALUT & TURTLE: Fast hard disk backup utilities.

U.30 GEMIN: Good alternative desktop from Germany. (1Mb).

U.57 ALICE: A GEM based text editor.

ART & GRAPHICS

A.84 GENVIEW: Load, view, convert just about any picture format (1Mb).

A.79 PRIMITIVE ENGINE 2.1: Multi-functional fractal image generator.

A.16 ARTIST FREEHAND: Excellent art package, multiple screens. (£2.50).

A.52 ROTAL PAINT: Finnish art package with all the usual features.

A.46 ELECTRIC IMAGE ART PACK: Drawing/painting program with full manual on disk.

A.78 MIB PICS: Reduce images up to 64 to a screen! Ideal for cataloguing.

A.45 CRACK ART: Demo version of the excellent German art program.

A.19 PRINTMASTER PLUS: Loads of art work for DTP (2 disks/£3.00).

A.36 KORMIC 4: Latest version of stunning psychedelic pattern creator.

A.37 PAD V2.4: Comprehensive movie art program with English documents.

A.76 POLYFLM by Brian Brownlow. Make films from multiple 3D polygon objects.

A.70 COMIC BOOK HEROES: 22 New pictures of your favourite superheroes.

A.62 ART OF DUNGEONS & DRAGONS: Superb collection of pics from Dragonlance.

A.1 ANI ST: Commercial quality animation program (once cost £50.00 to buy!)

A.30 FULL SCREEN: Display your pictures in stunning fullscreen mode. D/S.

A.14 FANTASY SLIDESHOW: Spectrum 512 pictures on your pictures (over 16's only).

A.47 PICTURE CONCEPT: Do weird and wonderful things with your fantasy.

A.64 ATARI IMAGE MAKER: Experiment with digital image processing.

L.26, L.27, L.28 TYPEWRITE CLIP ART: 4 disk sets of clip art in IMG format. £10.00 per set with a free printed catalogue of the art work on the disks included.

PROGRAMMING

P.44 GFA BASIC V.2: Full version of popular language with extensive tutorial. (NB: this disk is not P.D. - L.A.P.D. have permission to distribute it).

L.68 SPIRITS WORKERS: New commands for games writers using GFA V.2 (2 disks/£7.00).

M.107 RAINWORLD 2: Three dimensional art creator and viewer program.

P.37 HUNT N' SHOOT: A Hendler sort of Saxon.

L.A.P.D., PO Box 2, Heanor, Derby, DE75 7YP

Tel/Fax: 0773 605010/761944

Voice and Fax on both numbers

- P.19 GFA EXPERT: Massive text file and help routines for GFA Basic 3.0, D/S.
P.18 STOS TUTORIAL: Helps make clear some of the STOS commands.
S.65 XBOS MUSIC KIT: Includes superb music in your own programs.
P.16 ADVENTURE TOOL KIT: Write professional quality adventures in C.
P.41 STOS JOURNALS: Create your own text adventures with STOS.
L.46 STOS GRAPHICS CREATOR: Create your own point & click adventures with ease. (£3.00).
- SOURCE CODE**
P.36 UNIT SOURCE #1: Code from the Wild Boys, UNT, Paxl Twms, etc.
L.23 GRAY 2 SOURCE: All the code for the top rated ST game.
L.24 CHOS SOURCE CODE: All the code for the top rated ST game. (£5.00).
L.47 HUNCHY: Full source for the 'Hunchback' game on disk L.45. (£3.00).

MISCELLANEOUS

- M.155 ROUTE FINDER: Route finding program for England, Wales and Scotland.
M.19 AIR WARRIOR: Fight on with World War II aircraft.
M.161 THE GARDENER: A special database for gardening enthusiasts.
L.17 ADDRESS BOOK: Neat and easy to use database for names and addresses. (£2.50).
L.18 CIRCUIT: Easy to use electrical circuit diagram producing program. (£2.50).
M.154 RUMES: Miscellaneous interpretation of the stones.
M.143 POND & WATERGARDEN: An 'how-to-do-it' instruction disk.
M.130 TOP HORSE: A working demo of a horse race prediction program.
M.82 ROLE PLAY CREATOR: Create characters for 'Traveller' and 'AD&D'.
M.136 DUNGEON DESIGNER: Design dungeon floor plans for AD&D and similar games.
M.142 ZONK: Psychedelic pattern creator from Dave Henniker. (1Mb).
M.93 STITCH MATRIX: Pattern making program for knitting machines.
M.139 CROSSWORD CREATOR: Design your own puzzles.
M.111 NORTHERN & EQUATORIAL STAR ATLAS: Superb serious astronomy program SW.
M.77 THE BIBLE: King James authorised version, 4 DS disks/£5.00.
M.76 FORM-FINDER: Proven horse race analysis and prediction program.
M.81 NEWSDISK: Construct your own newsletters and magazine disks.
M.103 ULTIMATE CHEAT GUIDE: 320+ game cheats, plus hidden screens on 20+ disks.
M.100 GERMAN TRANSLATORS: Three programs to translate German text to English.
M.08 FLOFACIT: Electronic flash - diary, calendar, alarms, addresses, etc.
M.08 GENEALOGY: 2 programs for the family historian to trace their forebears.
M.108 CALENDAR: A calendar program that allows you to attach events to days.
L.17 ADDRESS BOOK: Neat database for storing, sorting, etc. (£2.50).
M.5 YOUR SECOND ATARI ST MANUAL: Text files about your ST.
M.17 WORD PUZZLE: Stuck with word games? Then this disk may help.
M.30 EXTRA WORD LIST: 70,000 extra words to use with disk M17.
M.40 STICKER II: An excellent label making program.
M.82 LEAGUE TABLE: Maintains league tables for soccer and similar sports.
M.13 ASSISTANT CHEF: Another 125 tasty recipes (1Mb).
M.117 TRIP-A-TROU: A light synthesiser by Jeff Miller.
M.14 PICTURES FROM SPACE: Photographs of the earth as seen from satellites.
M.94 ASTRO 22: Calculate position of planets, comets and zodiac.
W.5 to W.9 CALAMUS FONTS: 20 fonts appear on each disk.

BUSINESS

- M.106 ACCOUNTABILITY: Fully featured accounts program. 10 accounts, 2,000 transactions!
M.146 INVOICE MASTER: Invoicing system for small businesses.
M.13 OPUS 2000: A superb spreadsheet program (1Mb).
M.83 INVENTORY PRO: A stock control system.
M.116 COMPACT OFFICE MANAGER: Demo of accounting program for the small business.
U.23 DOUBLE SENTRY: Impressive accounts package for the small company. (No VAT).
U.33 PAST BASE: A powerful and flexible data-base.
M.139 BANK ACCOUNT MANAGER: Maintain up to 5 accounts for instant access.
U.69 CREDITORS & DEBTORS: A powerful and flexible data-base.
U.6 DRAKE ONE: Excellent GEM driven database. Simple to set up and use.
W.3 FIRST WORD: Word processor that sets the standard for others to follow.

EDUCATIONAL

- M.20 GCSE STUDY AIDS: Help with Algebra, Trigonometry and Geometry.
M.1 PLANETARIUM: Excellent, easy to use, astronomy program.
M.153 WORLD WAR II: Home town study pack for Sec. school work. (3 disks/£4.50).
M.7 HISTORY FILE: Investigate a historical murder in Scotland. (3 disks/£4.50).
M.41 GEOGRAPHY TUTOR - EUROPE: Facts and figures on European countries. SW.
M.64 SPANISH VERB TUTOR: Helps you learn correct conjugation.
M.86 DEATH OF A PRESIDENT: Investigate the Kennedy assassination. (3 disks/£4.50).
M.96 FRANCAIS 1 & 2: French language tutor programs.
M.114 FRANCAIS 3 & 4: French language tutor programs.
M.131 ROMAN MYSTERY: Teaching programs on Roman times. (3 disks/£4.50).
M.102 RIP IT UP: Working demo of Highway Code tutor.
M.123 C.I.A. WORLD FACTBOOK: Facts and figures on countries. (4 disks/£8.00).
M.144 WORKOUT: A general purpose learning and revision aid.
M.151 U.S.A. HISTORY: 20th century American history. (2 disks/£3.00).

KIDS EDUCATIONAL

- L.20 SUPER SPELL: Teaching games for the 4 to 9 year old. (£2.50).
L.37 SUPER FUN: Massive learning games for the 4 to 9 year old. (£2.50).
G.266 WITCHES, MICE & FAIRY TALES: Games for younger users.
G.263 NOAH'S ARK: Teach the animals, how to buy - addictive for adults too!
M.85 ABOUT THE HOUSE: Excellent collection of programs for young children.
M.58 KIDZ EDUCATIONAL: Alphabet, Math Test, Numerical-Go-Round & Number Maze.
M.37 KIDZ DISK #1: Colouring Book, Spell Pic, Word Pic and Flash Card.
M.42 KIDZ DISK #2: De la Dik, Keyboard Games & Mailing.
M.67 BODY SHOP: Graphic quiz-type human anatomy program.
M.54 PROFESSOR CLEVER: Maths tutor program for children aged 5 to 11. SW.
M.104 SOLAR SYSTEM GEOGRAPHY: Effects of the sun & moon, on tides, seasons, etc.
M.105 MAGIC SPELLER: Computer speaks the word and challenges child to spell it.
M.16 KIDZ COMPILOTION: Kid Graph, Gnd, Music, Notes, Piano, Publisher, sketch and story... all on one disk!
M.31 SHIPWRECK: Save the stricken mariner by answering maths questions.
M.97 COUNTING: Count the objects on the screen correctly to move the cyclist.
M.71 WOLF & 7 KIDS: A point and click first adventure for youngsters.
L.37 SUPER FUN: Excellent teaching educational program for youngsters. (£2.50).
L.20 SUPER SPELL: Teaching program for 4 to 9 year olds by Laxsoft. (£2.50).

- PRO.27 EARLY LEARNING MATS 2 by Philip Rankin for 9-12 years (£2.75).

SHOESTRING EDUCATIONAL SOFTWARE

- L.01 ROBOT MATHS: Maths tutor for children aged 6+ (£2.95).
L.02 MOON LETTERS: Spelling game for ages 4-6 (£2.95).
L.03 PICTURE MIX: Jigsaw puzzle game for ages 6+ (£2.95).
L.04 ROBOT MATHS: Hangman in a modern format (£2.95).
L.06 ALPHABET MIX: Jigsaw puzzle game with large pieces for youngsters (£2.95).
L.07 WORD RACE: Hangman type word guessing game with athletes. (£2.95).
L.08 ALL BLOCKED UP: Mathematical puzzles for the young. (£2.95).
L.10 DROP DOWN WORDS: Spelling memory game for youngsters (£2.95).
L.12 MATHS FUN: Maths for children 4 to 7 years (£2.95).
L.04 ROBOT MATHS: Hangman type word guessing game with athletes. (£2.95).
L.30 COMPILOTION #1: ROBOT MATHS & MOON LETTERS from above on one disk (£3.95).

COMMUNICATIONS

- C.22 TEDDYTERM: A superb multi-function communications program.
C.7 VANTERM V.4: Excellent multi-function communications program.
C.13 FREEZE DIED TERMINAL: Excellent comms prog. Includes ZMODEM facility.
C.14 ST KEEP: Room based BBS system. Requires hard disk.
C.15 KATTERM: Comms prog that can act as a mini BBS. Includes JEXYLL prog.
C.17 QSO-BASE: Database for radio hams to store QSO information.
M.138 MORSE CODE TUTOR: Practice and perfect your skills.

BUDGIE U.K.

- Full range of BUDGIE U.K. software available including the following:
BU.122 WORLD CUP: Home countries football management game (£2.75).
BU.121 SUPER SCRAMBLE: Fast action arcade shoot 'em up. (£2.75).
BU.119 FOOTBALL TACTICIAN 1: The original £19.95 version! (£2.75).
BU.113 FOOTBALL TACTICIAN 1st Div: Football game for up to 24 users! (£2.75). (Money back offer on BU.113 & BU.119 if you upgrade to the full GO-MOKE! Ancient Japanese board game against computer or friend. (£2.75).
BU.111 INTERNATIONAL CRICKET II: Animated 3D game. 1Mb. (£2.75).
PRO.20 VIDEO MASTER: Excellent video tiling program. (£2.75).
BU.50 SPACE INVADERS: Classic arcade action by Robert Leong. (£2.75).
BU.50 MATCH IT: Possibly the most addictive game ever devised. (£2.75).
BU.89 HORSE RACING SW: Quality sim from the sale ring to the track. (£2.75).
PRO.1 ELECTRONIC BANK STATEMENT: Compendious your accounts! (£2.75).
BU.30 QUEST FOR GALAXIA: The 'Galaxians' return to your ST. (£2.75).
BU.30 PACMAN ST: The definitive version by Robert Leong. (£2.75).
BU.17 MAKE A BREAK: Snooker based general knowledge quiz. (£2.75).
BU.22 BANDIT: An electronic slot machine with holds, nudges etc. (£2.75).
BU.9 TYCOON: Mineral exploration business game. (£2.75).
BU.53 FROM LITTLE ACORNS: A delightful adventure set in Goblins country. (£2.75).
BU.71 CATS IN THE HAT: Role play adventure with a 3D voice. (£2.75).
BU.86 QUATRS: A Tetris variant with rotating cubes. (£2.75).
BU.116 SPITTING FISH: Arcade game with educational slant. (£2.75).

POWERFIST LICENCEWARE

- L.43 SNOTT 97: Save the world platform adventure game. (£3.00).
L.65 JESS LOST HIS MARBELS: Large humorous text adventure (£3.00).
L.44 SEVEN GALAXIES: Large shoot 'em up with puzzles. (£3.00).
L.45 HUNCHY 1066: Re-working of the 'Hunchback' arcade game. (£3.00).
L.47 GHAFIA ONE: Arcade action on an alien planet. (£3.00).
L.48 DE LUXE NOSTAL: Arcade adventure in a Dark Tower. (£3.00).
L.51 POWEROUT: Local and destroy arcade game. (£3.00).
L.35 LOCATION UNIVERSE 3D: 3D virtual reality adventure. (£3.00).
L.58 CASTLE CAPEERS: Platform game around a haunted castle. (£3.00).
L.57 LORD RAMSEY IN THE 25TH CENTURY: Arcade action on an alien planet. (£3.00).

BUDGET PRICE DISKS - ONLY £1.00 each!

- B.56 SUPER GALAXIO: Galaxians return.
B.50 STAR TREK: Save the Federation!
B.45 FIGHTING SNAKE: Naval battles
B.42 CYBERSNAKE: Top rated action game
B.15 HOLYNUDGE: Fruit machine
B.34 CENTPEDE: Good arcade conversion.
B.33 BLASTER: Fast 'Dallender' action
B.41 MR. DICE: Falling dice puzzle.
B.21 CONCENTRATION: Kid matching game.
B.47 ROCKFALL: Bouldershield clone.
B.53 LAZER BALL: Lazer reflection puzzle game.
B.51 COLLOSSAL CAVE: The original adventure
B.44 FLY ROBIN: Cute shoot 'em up
B.39 ASTEROIDS: A loving restoration
B.20 HAZARD: Pacman action.
B.36 8 BALL POOL: Bar game simulation
B.34 LAPD GAME: Shoot 'em up
B.14 ROBOTZ: Superb arcade game.
B.27 FROGGY: The arcade classic
B.35 NOVA: Vertical shoot 'em up.

HEARTBREAK

One of the most compulsive and addictive games ever released by L.A.P.D.
Simple in concept, but complex in play (just like all the best games!)
Place tiles onto a square grid to make lines of seven tiles. But be prepared to be frustrated by odd shaped blocks of tiles, and tiles with special properties.
Mouse controlled with sampled sound.
ONLY £3.00
(Order disk no. L.66)

PROTECT YOUR DISK COLLECTION

If a virus gets free in your disk collection it can do irreparable damage in a very short time. Don't let it happen to you. We have two programs to help you protect yourself.
PROFESSIONAL VIRUS KILLER by Mike Mee £5.95. Identifies 529 different types of virus and bootsectors and could save you a lot of heartache if it traps that virus before it breaks free.
ULTIMATE VIRUS KILLER by Richard Karsmakers £9.95. Identifies 70 virus types and over 650 other bootsectors. Repairs damaged or destroyed BIOS parameters blocks.

TEACH YOURSELF MACHINE CODE

Learn to program like the professionals with ZZ Softs book and companion disk INTRODUCING ATARI ST MACHINE CODE! Be led, step by step into the secrets of programming the ST in its native 68000 assembly language. All you need to get started right away.
ONLY £19.95.

EASY TEXT PLUS

Desk Top Publishing on a budget. An ideal introductory program to DTP that will produce professional quality results. Full printed instruction manual included.
ONLY £19.95

STE UPGRADES

2 x 256K simms boards for easy upgrading of a 520 STE to 1Mb
ONLY £9.95

AUTHORS

L.A.P.D. are always on the look-out for new material to be included in their comprehensive catalogue of P.D., shareware and licenceware titles for the ST and the Falcon. If you have produced anything that you consider worthy of release either as P.D., shareware or licenceware then get in touch to discuss it with us. We can guarantee you a worldwide exposure for your program if it makes the grade.

LICENCEWARE

L.A.P.D. proudly support the concept of Licenceware and pay top rate royalties to their authors. Disks with an 'L' prefix in our advert are Licenceware disks and as such a proportion of the price you pay is passed on directly to the author. In the last quarter we paid almost £650 to our authors. If you have produced any good software for the ST, STE or Falcon and would like to know more about Licenceware then please contact us.

HOW TO ORDER

Please list the disk number and title as a double check. You can either post your order to the address above, telephone us at either of the above numbers or with a credit card or fax your order and credit card details to either number. Always include with your order details of your computer, memory size etc.
Please make cheques and postal orders payable to L.A.P.D.
Sending cash through the post is not recommended.

FREE CATALOGUE

For a FREE copy of our latest, user friendly, catalogue disk just send a blank disk end 5.s.a.e. to the address above and we'll send you one by return complete with a selection of quality PD. Alternatively send us £1.00 and we'll send you the same catalogue and free programs on one of our disks. (Please quote STU).

PRINTED CATALOGUE

Printed catalogue now available, listing hundreds of PD/Shareware/Licenceware titles. Only £1.00 including P&P or 50p if ordered with disks.
Please state if you have a Falcon.

PEED AND EFFICIENCY - SIMPLY THE BEST



Sweet memories

Treat your ST to sugar, spice and all things nice with a stonking new memory upgrade.

Andrew Wright reveals what's available, for how much, and where to get it from



Fitting a memory upgrade is one of the best things you can do for yourself and your ST. After all, random access memory or RAM is one of the ST's main components – like the disk drive, the CPU and all the other essential chips and components, you can't do anything at all without it.

All programs (and accessories) have to be loaded into RAM before they can be used and even more memory is required for data files. For example, a paint program will use around 32k for each screen size picture it keeps in memory while an image processing package, working on large 24-bit colour images, will need at least 500k to 1Mb for each one. There's no getting away from it – some programs just won't run if there isn't enough RAM, so the more you have the merrier you'll be.

In the early days of ST computing most people plumped for 520s – after all, who on earth could use more than 512k of RAM? Even their Spectrum owners at that time were still puzzling out ways of using their full 128k!

HORRIFIC

Some of the more far-sighted users went straight for the full megabyte but the price differential in those days was pretty horrific. Unfortunately it didn't take long before bigger, more powerful programs like Calamus started appearing and it was then that an upgrade to a whole megabyte started to look increasingly tempting. When the first 1Mb only games arrived, the writing was on the wall for the users still hatching away on 520s.

In a brief survey of the last 12 issues of Atari ST User, 25 per cent of the serious software titles reviewed or mentioned would run on any ST/STE. Some 42 per cent needed 1Mb while an astonishing 22 per cent needed 2Mb or more.

That doesn't include Falcon only software, incidentally, which is much more memory intensive. The picture for 520 gamers was a little rosier with only 40 per cent needing the full megabyte.

Of course, this is a wide generalisation. If you're happy doing your word processing and running the occasional PD game and leisure software, the extra memory won't be a high priority. That doesn't

Upgrading an STE

Existing RAM	Desired RAM	Instructions
512k	1 Mb	Add 2 x 256k chips in empty sockets
512k	2 Mb	Remove 2 existing chips and replace with 2 x 1 Mb chips
512k	4 Mb	Remove 4 existing chips and replace with 4 x 1 Mb chips
1 Mb	2 Mb	Remove 4 existing chips and replace with 2 x 1 Mb chips
1 Mb	4 Mb	Remove 4 existing chips and replace with 4 x 1 Mb chips
2 Mb	4 Mb	Add 2 x 1 Mb chips

mean you couldn't benefit from it – it would allow you to load extra accessories, more AUTO folder programs and even try out a sizeable RAM disk.

On the other hand, if your sights are set on the really important serious software launched in the last year or so – like MultiTOS, SpeedoGDOS and DA's Vector – that 512k will be looking awfully cramped.

Any gamer about to argue that 60 per cent of games run perfectly well in a half megabyte machine might well be deluding themselves – if you want to play the up-to-date favourites like Elite 2, Zool and Legends of Valour, you'll need every little byte you can get, and at least a meg.

FIDDLY

Opening up your ST isn't half as daunting as you might think. Fiddly, yes, dangerous, no. It does invalidate your warranty, though, so only try it if you know the warranty has expired or you've decided nothing is going to go wrong with it! In fact STs are extremely reliable machines so the odds are on your side.

The first thing to do is switch off the machine and remove the power lead. Now turn the ST upside down and remove all the screws in the square. Holding the case carefully, turn the ST the right way up and take off the top cover.

Unplug the keyboard and remove the separate metal shields around the power supply and disk drive. Now remove the disk drive (attached by three screws accessible from the underside), disconnect it and put it somewhere safe. Unscrew and remove the power supply board being careful not to touch any of its components. Finally lift off the large

metal shield by straightening the metal fasteners that hold it to the board. You should now be looking at a bare motherboard. Impressive, isn't it?

A standard off-the-shelf 520 STE has two 256k SIMM or SIP-style RAM chips in four special slots more or less in the centre of the motherboard (a 1040STE has four such chips while a 2Mb model has two 1Mb chips and a 4Mb model has four).

The earlier models such as the ST, STF and STFM had two banks of eight smaller chips soldered to the board if they were 520s and four banks if they were 1040s. These are usually sited on the left hand side of the motherboard, often under the power supply.

STEs are far easier to upgrade as 99 per cent of them will accept plug-in SIMMs while the other one per cent take the rather more awkward SIPs. If you have a SIMM-style STE, you buy extra chips and slot them in, bearing in mind that the slots have to be used in pairs.

With a SIP-style STE, it is far better to add special converters that plug into the motherboard and in turn accept SIMMs (they are sold with the Marpet STE upgrades). If any of the chips are soldered, send it to a specialist centre –

Marpet XtraRAM ST Deluxe

The Marpet XtraRAM ST Deluxe consists of three components – a small 40mm by 30mm MMU adaptor, an L-shaped 54mm by 33mm video shifter adaptor and a large 100mm by 75mm board for the SIMM-style RAM chips. Two lengths of cable are supplied for connecting the adaptors to the main memory board.

There are also a number of wire jumpers with spring loaded clips which are used for disconnecting memory banks in some circumstances.

The upgrade is adequately packaged and comes with a comprehensive instruction manual that covers every conceivable combination of chips and motherboard layouts. It isn't particularly easy to follow but if you're in doubt, you'll find the answer somewhere inside.

Marpet's XtraRAM Deluxe will upgrade any 520STFM, 1040ST F or FM and a Mega 1 or 2 ST. The beauty of the XtraRAM Deluxe is that you can upgrade in steps if you want to, with 1Mb, 2Mb or 4Mb configurations though it makes little sense these days to go for the 1Mb option as the two 256k SIMMs may well be wasted when you upgrade to 2 or 4Mb.

As industry standard SIMMs are used, you can buy the unpopulated board and shop around for the RAM chips if necessary.

Fitting the upgrade is relatively easy, thanks to the comprehensive instructions, but it can be awkward finding room for the large board and if you have the rectangular MMU, some soldering will be required. A RAM testing program is supplied on a disk so you can check that it all works.

The XtraRAM Deluxe is the best selling board in the UK and comes highly recommended, particularly if you're looking at a 2Mb upgrade – who's to say you won't need more in a year's time?

Questions and answers

What on earth are SIMMs and SIPs when they're at home?

A SIMM is a Single In-Line Memory Module while a SIP is a Single In-line Package. SIMMs and SIPs are actually small circuit boards with eight or nine RAM chips on them and they differ mainly in the method of connection which is a row of pads for SIMMs and a row of pins for SIPs. Both can vary in size from 256k up to 4Mb.

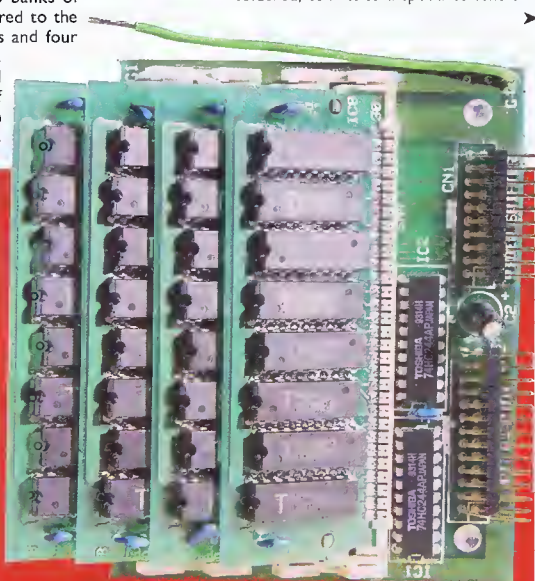
What speed does my memory have to be?

RAM speed is measured in nanoseconds but it makes little or no difference whatsoever to your Atari what speed they are as long as each pair of chips is the same speed. Far more important is the price and as you pay a premium for faster 70ns or 80ns chips, go for the cheapest.

Can I have a 2.5Mb machine?

Yes, in certain circumstances. Upgrades like the Marpet XtraRAM allow you to use one bank of 2 x 1Mb and one bank of 2 x 256k RAM chips provided you don't have the 100109 MMU variant.

For STEs it is also possible using a special software patch which is available from PD libraries. Ask for the programs MEM25STE or SIMMFIIX, both of which are supplied with Go Direct's upgrades or via PD libraries like the ST Club.



Product: XtraRAM
Deluxe 2/4 Mb

Supplier: Marpet Developments, Meadowfield
Farm, Fellbeck, Pateley Bridge, Harrogate
HG4 1LU

Telephone: 0423 712600

Price: £179.99

Configuration: Any 520/1040
STF/M or Mega ST



you can do an awful lot of damage to the motherboard in no time at all. Table 1 shows you how to go about it.

STFMs are a different kettle of fish, but the upgrades all work in much the same way. The original memory on the motherboard is bypassed completely and a new memory bank installed.

This requires that the MMU or memory management unit be modified slightly and also that the new RAM be connected to the video shifter chip. This can be a somewhat more laborious process than with an STE but at least the benefits are the same!

In the centre of the motherboard is a large silver metal box. If you gently unfasten the lid, you'll see a rectangular chip. This is the video shifter and it can be socketed (removable) or surface mounted (soldered to the board). It will be marked either 25914 or 70713.

If the chip is socketed, so much the better, but don't despair otherwise. It just makes fitting a little more difficult as a special adaptor has to be placed over the chip. If you're in any doubt, send it off to a specialist repair centre.

There are four different motherboard layouts to contend with. Look for a large square chip with the number CO25912 or CO100109 on it. This will be the MMU.

If you can't find it, look for a rectangular chip with the number CO101601. If you find one of them, mutter silently to yourself – soldering is required and it's a job for the experts.

If you find a square socketed MMU (socketed chips are noticeably raised and may have spring clips across) it could be

Where to go

Marpet Developments are without doubt the UK's leading Atari memory specialists and they have appointed two agents to carry out upgrades, Peak Electronics (0429 860821) for the north and Analogic (081 546 9575) in the south.

All the company's products carry a two year warranty and there is on-line telephone support if needed.

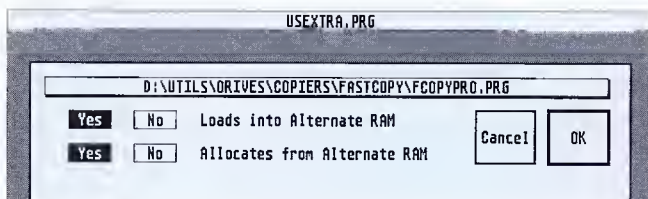
In addition to Power Computing and Evesham Micros other places to go include Go Direct (0480 891819) who will supply and fit Marpet XtraRAM upgrades or their own proprietary brand based on the Marpet system.

A free disk full of memory checking utilities is included. System Solutions (081-693 3355) and Ladbroke Computing (0772 203166) also supply Marpet upgrades, the latter having recently discontinued their own Aries brand.

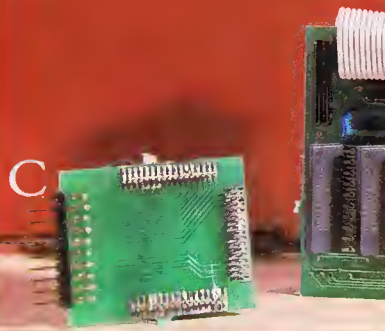
in one of three positions, to the left of the video shifter (Type 1), to the right of the video shifter next to another square chip (Type 2) or in front of and very close to the video shifter (Type 3). These types of motherboard don't normally cause problems unless the video shifter is soldered.

If you find a square MMU that is surface mounted – stuck solidly to the motherboard with small silver legs showing – it makes things a little more awkward but by no means impossible.

Whoever sold you the upgrade should be able to provide a special adaptor – certainly companies like Marpet and Go Direct are well equipped to help.



The supplied utility can make most programs aware of the extra RAM – Fastcopy Pro, for example, will now use the full 8Mb



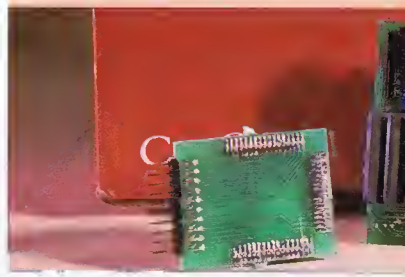
Power Computing 2/4Mb upgrades

Power Computing can supply their own brand 2 and 4Mb upgrades which take a slightly different approach to the others. The upgrade consists of a 100mm by 63mm L-shaped video shifter adaptors and a smaller 40mm by 30mm MMU adaptors.

There are also a number of jump leads with red spring loaded clips. The two boards are linked by a single 200mm cable.

In contrast to the Evesham method, the Power upgrade has the RAM configured as 512k chips – 4 for the 2Mb version and 8 for the 4Mb – on the video adaptors board rather than the MMU adaptors.

This offers some advantages in that there is no bulky board piggy-backed on the MMU which can cause a bulge in the main shielding (or necessitate a square being cut from the shielding). On the other hand the video



Marpet XtraRAM STE

STE owners have it remarkably easy, of course, and about 90 per cent of you will be able to buy SIMMs off the shelf and insert them into the appropriate slots.

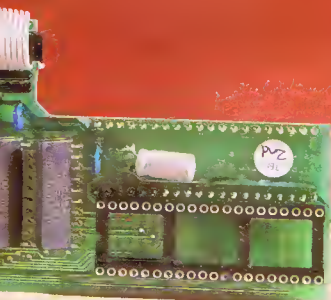
However, Marpet supply dedicated STE upgrade packs comprising 1, 2 or 4Mb upgrades. These consist of SIMM-style RAM boards with special 96mm long converter strips for the ten per cent or so of STEs that require SIP-style chips instead. The packs come with a double sided A4 sheet of instructions.

Just how easy it is to fit depends on what you already have in your STE and what you want to end up with – if you have 2Mb already and want to upgrade to 4Mb, it couldn't be easier as all you have to do is fit the two extra boards but if you're upgrading a 1Mb STE to 4Mb, you'll have to remove all four existing 256k boards and replace them with the four new 1Mb ones.

If you're unsure about how to go about your STE upgrade, it makes sense to look at the Marpet upgrade if only for your peace of mind and the comprehensive instructions.



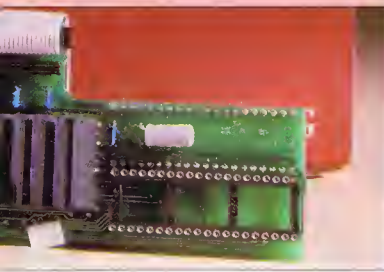
Supplier: Marpet Developments,
Meadowfield Farm, Fellbeck,
Pateley Bridge,
Harrogate HG4 1LU
Telephone: 0423 712600
Price: £79.99
Configuration: Any 520/1040/2Mb STE



shifter compartment lid has to be cut away to make room for the bulky Power board.

The difficulty with the Power upgrade is that it only works with socketed video shifter and MMU chips – if you have the surface mount variety, you won't be able to do the job yourself. If you're fitting a 4Mb upgrade (or a 2Mb upgrade to a 1Mb machine) you will also need to cut some resistors on the motherboard and hook them to the RAM board using the supplied jump leads.

Product: 2/4Mb RAM board
Supplier: Power Computing, Unit 8, Railton Road, Woburn Road Industrial Estate, Kempston, Beds MK42 7PN
Telephone: 0234 843388
Price: £99/£169
Configuration: Any 520/1040 STF/M with socketed chips



Marpet XtraRAM Plus 8

Of course if you want to go one better than your neighbour, there's always the option of the king of memory upgrades, the Marpet XtraRAM Plus 8. If you have an STE or a Mega ST, you can add a special plug-in board that offers either 4 or 8Mb of extra RAM, on top of your machine's built-in RAM.

If you use your fingers to count you'd better get your socks off because you can then have 4Mb of normal RAM and 8Mb of extra RAM, making a grand total of 12Mb!

There are a few ground rules though, so don't get your credit card out yet. You will need a 2 or 4Mb STE and one that uses SIMMs, rather than SIPs. You will also have to have TOS 2.06 specially installed in ROM.

The unpopulated XtraRAM Plus 8 board costs a mere £59.99 and you can then shop around for industry standard SIMMs. Alternatively, Marpet's price of £349.99 for the board and two 4Mb SIMMs isn't at all bad considering the cost of memory at present.

The Plus 8 itself is a large L-shaped board that contains its own separate MMU chip and the sockets for the 4Mb SIMMs, and fits tidily if a little awkwardly on top of the STE's CPU.

No soldering is required and the installation can be done quickly and easily by mounting the Plus 8 board piggy-back fashion onto the CPU. There's a small support underneath to keep it attached and stable when the shielding is replaced. Note that no cutting is necessary despite the size of the board.

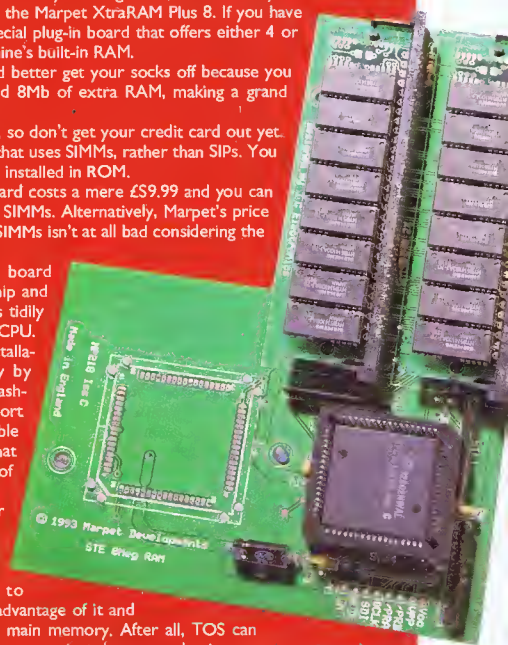
The Plus 8 board fools the STE or Mega ST into thinking it has TT style extra RAM fitted. Many older programs will not be able to use this extra memory, whatever you try and do to them, as they weren't written to take advantage of it and they will only be able to use the STE's main memory. After all, TOS can only address 4Mb of RAM and the extra part is only accessed using some programming trickery.

Programs that were written with the TT in mind will almost certainly be able to use the extra room, even if it does become necessary to use the supplied utility that alters the program flags and instructs it whether or not to use the extra RAM.

The list of programs includes all versions of Calamus, Didot Professional, DA's Vector and image processing programs like Chagall.

Some RAM disks will work too, including RAMBUFFR and RAMBABY, the PD accessory RAM disks, making it theoretically possible to set up an 8Mb RAM disk for running programs and storing data!

It is important to note that there are still two separate areas of RAM and the biggest single block will be 8Mb or so depending on your configuration. Nonetheless if you're into DTP, graphics, image processing or CAD, this could be just the job for really banishing those out of memory blues.



Product: XtraRAM Plus 8
Supplier: Marpet Developments, Meadowfield Farm, Fellbeck, Pateley Bridge, Harrogate HG4 1LU
Telephone: 0423 712600
Price: £59.99 unpopulated/£349.99 with 8Mb on board
Configuration: Any STE with TOS 2.06 and 2 or 4Mb RAM using SIMMs

Evesham Micros 1Mb upgrade

Evesham Micros have been selling memory upgrades for the ST for as long as I can remember.

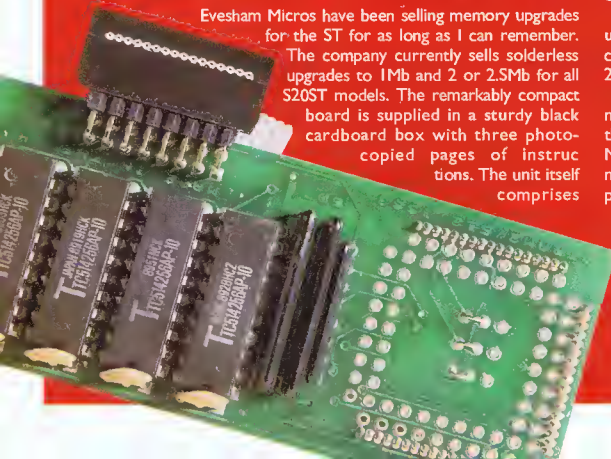
The company currently sells solderless upgrades to 1Mb and 2 or 2.5Mb for all 520ST models. The remarkably compact board is supplied in a sturdy black cardboard box with three photocopied pages of instructions. The unit itself comprises

a small green board some 86mm long and 39mm wide with three sets of downward pointing pins for attachment to the MMU.

The memory chips (four 256k RAM chips in the case of the 1Mb upgrade) are soldered to the upper surface of the board. A 240mm cable connects the board to a video shifter adaptor 55mm long by 25mm wide.

The instructions are brief but effective and especially good for those new to the upgrade game who have never opened up an ST before. On the other hand, not all possibilities are covered (the rare rectangular MMU) and in some circumstances, such as a soldered in MMU, you will need to obtain additional (free) parts from Evesham before you proceed.

Product: 520ST plug-in RAM upgrade
Supplier: Evesham Micros, Unit 9, St Richards Road, Evesham WR11 6TD
Telephone: 0386 765500
Price: £49.95
Configuration: Any 520ST/M



It's the old, old problem — you've got one type of computer at work, one at home and a third at your mate's house. If you've got kids, the chances are there's even a fourth at school.

Generally speaking the IBM-compatible PC is the prime choice for big companies while the Apple Macintosh is still the accepted standard in desktop publishing and creative graphics.

In schools, the Acorn Archimedes is coming out on top, gradually replacing the old BBC micros, while at the home computer end, the Amigas and Ataris are still battling it out.

None of these five main computer platforms have much in common other than a screen and a keyboard. They might be able to share many peripherals like hard drives and printers but the chips they're based on and the operating systems that make them work are about as different as they could possibly be.

Naturally this presents problems for those who want to swap information from one to another, be it a scanned graphics file, a 30,000 word dissertation or even a piece of music.

There are scores of reasons for transferring files — you might want to take a long letter written on an ST at home and print it at top quality on a laser at work, or you might have access to a flatbed scanner at the office on which you want to scan full colour images for viewing on your ST.

Happily there are a couple of areas where most computers agree — they share the same 3.5in floppy disk drives and invariably have RS232 standard serial ports. If you want to swap scuff around, these are the places to look.

The logical way to transfer files from one computer to another is to use the disk drive. Unfortunately most computers have their own ways of formatting disks so that they can store information and not all of them can read those formatted for different machines.

The good news is that the world is slowly starting to standardise on

one particular format, the MS-DOS disk format used in IBM-compatible PCs.

The Apple Macintosh has the most radically different disk format but with the appropriate software (Apple File Exchange, DOS Mounter) almost all Macs can now be persuaded to read MS-DOS disks.

The Archimedes has MS-DOS file compatibility built in, although it uses a different system by default, and the Amiga can read and write MS-DOS disks with special software like CrossDOS, DOS-2-DOS or MessySID.

Luckily for most ST owners the ST's TOS disk handling routines were based largely on those in MS-DOS and the disk

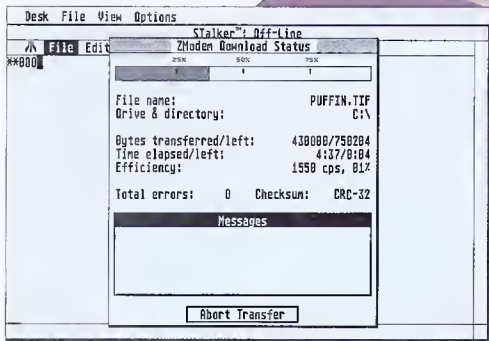
formats are remarkably similar. Unfortunately there is no such thing as 100 per cent compatibility as some PCs will not read ST formatted disks under any circumstances, even if formatted using specialist software like Fastcopy Pro, Diamond Formatter or Maxifile.

Interestingly the use of a PC emulator doesn't appear to help much in my experience but it is hard to generalise because there are so many different makes of floppy disk drive fitted in STs that one will work where another fails.

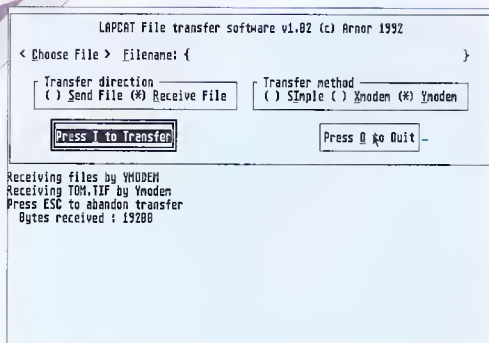
Disks formatted on a PC can be read by an ST more reliably (with TOS 1.4 or later) but quite often writing to the disk on one machine can make it unreadable

Andrew Wright looks at ways of getting your ST to talk to other computers

Cross



Serial transfer requires a comms program at each end



Lapcat in action

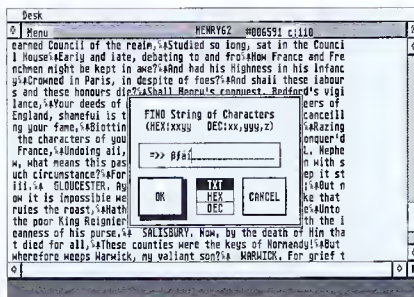
on the other and the whole process is fraught with difficulty. Incidentally the Falcon seems to have cured the problem completely and now formats, reads and writes disks usable in most PCs.

Apple File Exchange is another bugbear as it rejects around a half of disks formatted on an ST and the ST doesn't appear to read anything formatted within AFE either.

Diamond Formatter will create AFE compatible disks with a slightly higher chance of success but if you are regularly swapping information between STs and Macs, it's worth investing in better Mac software or perhaps the Spectre GCR emulator for the ST.

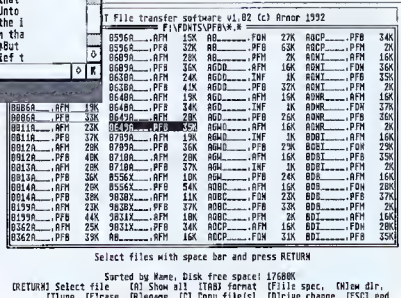
If transfer via floppy disk doesn't work – or if the files are simply too big to fit on a floppy – cable transfer is the next option. The traditional method is to use serial link but of course the two computers have to be side by side, which is a little awkward if you're trying to get material to and from a computer at the office.

If you really can't get the computers into the same room, they can be connected using modems but this means you'll need a telephone connection and a whole lot of new skills. Modern transfer



Text editors like EdHak will remove unwanted carriage returns and line feeds, as well as search and replace spurious characters

Selecting files using Lapcat



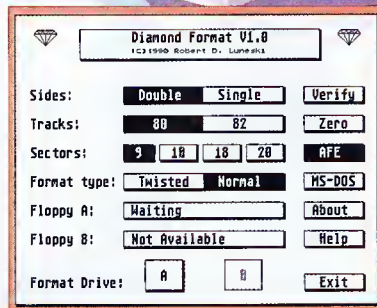
the AUTO folder or simply turning RTS/CTS off completely – at both ends. In tests on the same files, an average transfer rate of around 1,500 characters (1.5k) a second was achieved using STalker linked to a PC and the Z modem protocol. It isn't ideal – a 1MB file will take about 11 minutes – but often it is the only way.

There is another cable option. Arnor's Lapcat software was designed for transferring information from the Amstrad NC100 and NC200 notebooks and it uses a special parallel cable to do the deed.

Software is available for transferring files from the notebooks to PCs, STs, Amigas and Archimedes but the same software can be used to swap data between any computer combination. Data transfer is much faster (around 3000 cps or 3k a second) but considerably less than the maximum theoretical speed of the parallel port which is somewhere in the region of 500k a second.

Three protocols are supported including simple transfer (no error checking and therefore fastest), X modem and Y modem (which supports the batch transfer of more than one file at a time).

Unfortunately, the physical transfer of files isn't the end of the matter. For example, each ST word processor uses a slightly different format for saving text, so it's only natural to expect the same from word processors on other computers. Word processors like Redacteur and Protex will read word processor files from PCs, including those from



Diamond Format creates AFE and DOS compatible disks – up to a point

purposes

ain't for the faint hearted. For serial transfer you'll need a null modem cable – a standard serial cable with pins 2 and 3 swapped around – and a compatible communications package on each machine.

This means a comms programs that will send and receive using the same protocols, something which shouldn't be difficult as most comms programs now handle X, Y and Z modem.

For best results set the baud rate to 19,200 and ensure that other settings such as data bits and parity are the same. You may experience problems with RTS/CTS flow control as the ST's end of it is well and truly buggy.

This may require a patch program in

Microsoft Word, WordPerfect and Wordstar.

The best way to transfer text is to use the Microsoft RTF format, if possible, because it preserves formatting such as bold, italic and underlined characters.

Programs like Redacteur and Protect both support RTF transfer. Ascii is the second best option as all computers understand the Ascii character set, but some characters won't be translated correctly.

For instance, the pound sign is represented by the 156th character in the ST's character table but on IBM PCs it is the 163rd, which is actually the letter u with an acute accent on the ST. A text editor with good search and replace facilities will come into its own when you're transferring text files.

The other common problem is line and paragraph endings. STs and IBM PCs insert both returns and line feeds to mark the end of a line but the Apple Macintosh uses only the carriage return to signal a new line — if you edit a text file originated a Mac, it will appear to be all on one extremely long line!

In general though, as long as you give some consideration to the format and understand the minor differences, there shouldn't be any real problems.

All zipped up

Occasionally you may need to transfer something like a scanned image that is just too big to fit on a 720K floppy disk.

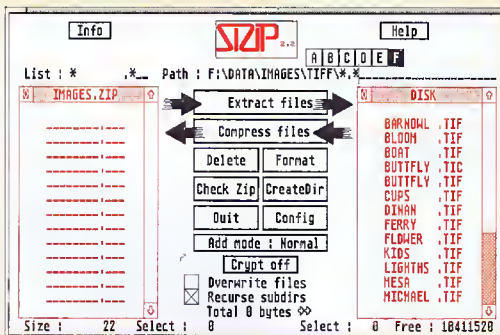
The best thing to do is compress the file using one of the standard archiving systems such as ZIP, LZH or ARC.

The best one to use is ZIP as the ST version has a neat user interface and features full compatibility with PKZIP, the PC standard. There is also a version of ZIP on all the

other major platforms.

You will need to ensure that you are using the latest versions of the programs and it is advisable to carry out a simple test run first to check for incompatibilities.

LZH is a good alternative but there are some incompatibilities, as early versions won't work with files compressed using subsequent versions.



Use ZIP to compress files before transfer — as long as you have a similar utility on the target machine!

Sound and vision

In many ways, transferring graphics and sound files is a lot easier than transferring text. Many painting, drawing and DTP packages will import and export graphics in formats that can be used on other computers.

The ones to look for here are the Macpaint, EPS and TIFF formats on the Mac, TIFF, EPS and PCX formats on the PC and the IFF format for the Amiga. If your target program won't import them directly, it's unlikely to cause a problem as there are dozens of utilities that will do the job.

Public domain catalogues are stuffed full of conversion programs. A good choice for graphics conversion is the shareware program GEMView, now up to v3.01.

It supports GIF, IFF, Imagemag, TIFF, BMP, GEM, ART, Tiny, Spectrum, Macpaint, Targa, JPEG, SUN, PAC, BMP, RLE, IMG/XIMG,



Paula is a shareware MOD file player

Vivid, ESM, PhotoCD, NEO, Degas and Doodle format graphics files so you shouldn't have much trouble converting your pictures! You can save files in most formats, including TIFF, Targa and GIF formats.

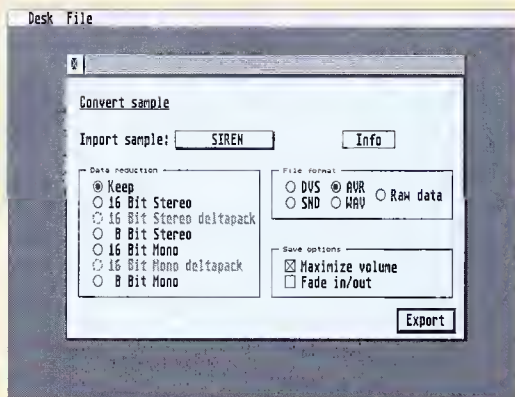
Sound is another up and coming area of file exchange, particularly with the coming of the Falcon and its built-in sampling and replay facilities. The major formats include the Midi file format, MID, the Amiga MOD format and the Microsoft Windows WAV format.

Standard MID files can be played on any machine that has the software to play them so you can swap your MID files with musician

friends who happen to own PCs or Macs and there are several utilities for converting the formats across to what has now become the standard on the ST, the AVR sample format.



GEMView is an ideal picture converter



525 converts sound from Windows WAV format to the ST's AVR format

FaST Club

For users of Atari ST & Falcon computers

7 Musters Road - Nottingham - NG2 7PP
Tel: 0602-455250 - Fax: 0602-455305

Software

- | | | | |
|---|--------|--|--------|
| <input type="checkbox"/> Address 1.6 | £12.95 | <input type="checkbox"/> Imagecopy 1 (Mono) | £ 9.95 |
| <input type="checkbox"/> Astronomy Lab | £24.95 | <input type="checkbox"/> Imagecopy Colour | £14.95 |
| <input type="checkbox"/> C-Font2 | £ 9.95 | <input type="checkbox"/> Key Master | £ 6.95 |
| <input type="checkbox"/> CalAssistant | £19.95 | <input type="checkbox"/> Molgraph 2 | £24.95 |
| <input type="checkbox"/> CalAssistant SL | £29.95 | <input type="checkbox"/> Mouse Master | £ 9.95 |
| <input type="checkbox"/> Clip Art Catalogues (2) | £ 4.00 | <input type="checkbox"/> Mouse Tricks 2.15 | £ 9.95 |
| <input type="checkbox"/> TW Clip Art Catalogue | £ 2.95 | <input type="checkbox"/> Multiprint | £ 9.95 |
| <input type="checkbox"/> TW Clip Art Set 1 | £ 8.50 | <input type="checkbox"/> PageAssistant | £29.95 |
| <input type="checkbox"/> TW Clip Art Set 2 | £ 8.50 | <input type="checkbox"/> Redacteur 3.15 | £99.00 |
| <input type="checkbox"/> TW Clip Art Set 3 | £ 8.50 | <input type="checkbox"/> Redacteur Lite | £69.00 |
| <input type="checkbox"/> Easy Text Plus DTP | £19.75 | <input type="checkbox"/> Redacteur Junior | £39.00 |
| <input type="checkbox"/> Easy Text Pro DTP | £39.95 | <input type="checkbox"/> Trimfont | £ 9.95 |
| <input type="checkbox"/> EdHack | £14.95 | <input type="checkbox"/> Ultimate Virus Killer | £ 9.95 |
| <input type="checkbox"/> Fontkit Plus 4 | £24.95 | <input type="checkbox"/> Universal Item Selector III | £14.95 |
| <input type="checkbox"/> Fonty: Calamus Font Editor | £11.95 | <input type="checkbox"/> Warp 9 | £24.95 |
| <input type="checkbox"/> FontGDOS and Drivers | £ 2.95 | <input type="checkbox"/> X-Debug | £24.95 |

Second Time Around

- ☐ 20 x 3.5" DSD disks £5.95
- Following re-organisation of our PD catalogue we have lots of disks that have been used, re-formatted and re-labelled. A bargain!

Newsletter setter

- ☐ Fontpac+ Newsletter Set £14.95
- Complete set of fonts suitable for use with Timeworks Publisher or any other program that uses GEM bit-mapped fonts. Ideal for newsletters, magazines, reports, and booklets. Requires high-res monitor and 300-dpi printer.

Fonts to go

- ☐ Textstyle - launch price £14.95
- Another cracking program from Jeremy Hughes, author of Imagecopy. Enter your text into Textstyle, select a Calamus or GEM font, add text effects and justification, and the resulting picture file can be imported into a whole range of packages. Great for generating headlines for wordprocessors like First Word Plus, Redacteur or Write ON; or use it with an art package such as MacDraw, Adobe Illustrator, CorelDraw, etc. Thousands of applications. RRP: £19.95

- ☐ Textstyle bundle £9.95
- Order Textstyle at the same time as Imagecopy2 or PixArt and save another £5.

PD and Shareware

- ☐ ST Club Catalogue Free
- Probably the most comprehensive catalogue for the ST. Details on hundreds of PD and Shareware disks plus specifications of all of the products listed in this advert.
- Disks cost £1.25ea; or just £1 for subscribers!
- ☐ Falcon Club Catalogue Free
- Details of our Falcon specific software.

What a picture

- ☐ Imagecopy 2 £19.95
- There is no better way to grab, view, convert and print images on your ST or Falcon. Supports 8-pin and 24-pin Epson compatibles, Cannon BJ, HP DeskJet, Laserjet mono and colour printers.

Only the best

- ☐ View II £14.95
- "The most useful utility ever written" ST Format.

Fast and furious

- ☐ Warp9 v3.8 £29.95
- At last, the Falcon enhanced version of our highly acclaimed screen accelerator package, Warp 9.

New stocks!

- ☐ Your Second Manual £8.95
- Hidden away in an office in Denmark we have unearthed what must be the last stocks of this classic ST book. If you feel as if your computer knows more about computing than you do, then you need this book! A brilliant introductory text for beginners or anyone new to Atari computers. This is the authorised printed version of Y2M: beware of imitations!

Great fonts

- ☐ Calamus Font Set £8.50
- 10 DS disks of PD and Shareware fonts in a box.
- ☐ PageStream Font Set £8.50
- 10 DS disks of PD and Shareware fonts - includes four disks of PostScript fonts.
- ☐ STC Fonts Catalogue £2.95
- Catalogue and printouts of the fonts in our professional quality range of Calamus fonts.

Omikron

We are the UK distributor for this famous German software publisher. Our release schedule for the English versions of their ST and Falcon software:

- ☐ PixArt £34.95
- Feature packed true colour pixel painting program. PixArt is very quick, supports digitizers and graphic tablets, supports all ST-IT and Falcon screen resolutions (monochrome to 16.7 Million colours) and runs on all fully GEM-compatible graphics cards.
- Other highlights: you can zoom in or out of the picture and still use all the drawing tools. PixArt has very creative block manipulation facilities that will be of great use to DTP users. PixArt is fully Falcon compatible. *Wonderful, wonderful!* is how the German Atari magazine TOS summed up its feelings about PixArt Available: Now.



- ☐ Freeway £tba
- A new generation database that combines free-form text database structures with traditional field structures. Accessible internal SQL-structure and fully Falcon compatible. Available: February
- ☐ Mortimer £14.95
- Memory resident multi-function utility that can be called on from within any GEM or TOS application. Features include: text editor, printer spooler, keyboard macros, virus guard, flexible RAM disk, screen grabber, disk utilities such as file copying and disk formatting, and a pop-up pocket calculator. Available: Now
- ☐ Mortimer DeLuxe £34.95
- Even more features: ten text editors, file search, disk copier, better file selector, time scheduler with alarm, and more... Fully compatible with ST, TT and Falcon computers. Available: February



ST Applications

For the last three years we have been publishing a monthly magazine for ST users. Full of informative and authoritative articles ST Applications is an essential read for all Atari users who are serious about getting the best out of their machine.

Don't take our word for it, here are some unsolicited comments from happy readers: *unfurlingly interesting, superbly written NWF really excellent value GFS invaluable service for ST users PS consistently impressed AS no hesitation in renewing my subscription PPK you can read it again and again RF* Originals of these letters available for inspection at our offices.

Overseas subscriptions welcome, in fact 25% of our readership live outside the UK. Air Mail subscription rates: Europe - £27, RoW - £57.

Risk Free. Subscriptions to ST Applications are risk free. Write asking us to cancel your subscription and the full unused balance of your subscription will be refunded by return of post. We have been publishing software, books and magazines for the Atari market for over 10 years.

Falcon Applications
Includes our mag-in-a-mag supplement on all things Falcon

Subscriptions

- ☐ 12-issues: £24.00
- ☐ 3-issue trial: £5.00
- ☐ Sample issue: £2.50

Dust Covers

These dust covers are manufactured from top quality water resistant and tear proof nylon fabric coated with top polyurethane and treated with an antistatic inhibitor. Unlike cheap PVC covers they may be washed and ironed. Covers are grey with blue piping.

Computer Covers

- ☐ 520STFM/1040STF/STE £5.45
- ☐ Falcon030 £5.45

Monitor Covers

- ☐ 12" monitors £6.95
- ☐ 14" monitors £6.95

Please specify monitor make and model:

Printer Covers

- ☐ Dot Matrix Printers £5.95
- ☐ Laser Printers £7.95

Please specify printer make and model:

Books

- ☐ Users' Guide to 1st Word £ 6.95
- ☐ ST 30 Graphics Programming £22.95
- ☐ Atari ST Basic To C £18.45
- ☐ ST Disk Drives: Inside And Out £18.95
- ☐ ST Machine Language £18.45
- ☐ Atari ST Programmer's Guide £22.95
- ☐ Desktop Publishing: The Book £ 6.95
- ☐ Introducing ST Machine Code £19.75
- ☐ Midi and Sound Book for ST £17.25
- ☐ Musical Applications of the ST £ 5.95
- ☐ Tech Ref Guide Atari ST Vol 2 £19.95
- ☐ Tech Ref Guide Atari ST Vol 3 £22.95
- ☐ Guide to Timeworks OTP £ 9.95
- ☐ Your First Basic £14.95
- ☐ Membership Complete Atari ST £14.95
- ☐ ST Assembly Lang Workshop £14.95

Ordering

- ☒ ... Tick the items you require and send this advert, a photocopy, or just a list on a sheet of paper with your name and address, along with a cheque or Postal Order, to us at: ST Club, 7 Musters Road, Nottingham, NG1 1PS. Please allow up to 4 days for your goods to reach you. Sorry, we do not take credit card orders or telephone orders.

Overseas Orders Welcome - Please request a copy of our Overseas Price List. **Membership** - You do not have to join or subscribe before you can buy from us, and you are not under any on-going obligation to buy from us when you do subscribe.

£ _____ Cheque/PO enclosed.

From:.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

When the Falcon was announced, one feature which had musicians drooling was the prospect of direct-to-disk recording without the need for any additional hardware. The Falcon's built-in DSP (Digital Signal Processor) is capable of performing the fast data transfers required to do this.

DigiTape from the German Tradelt company, is the latest piece of d-t-d software to appear – and more, such as Musicom 2 and Cubase Audio, are on the way.

The program is copy-protected by a dongle which actually plugs into the Falcon's DSP socket. This leaves the cartridge port free for a music software dongle. It requires a screen resolution of 600 x 400 and will run in mono or colour. Colour is much better although if you use more than 16 colours, it may slow down performance.

Operation is based around a series of windows which are selected from a GEM menu bar. None of the windows has a menu of its own – functions are selected by clicking on icons within the window which cause sub-menus to pop up. Only one window can be active at a time.

CREATE A TAPE

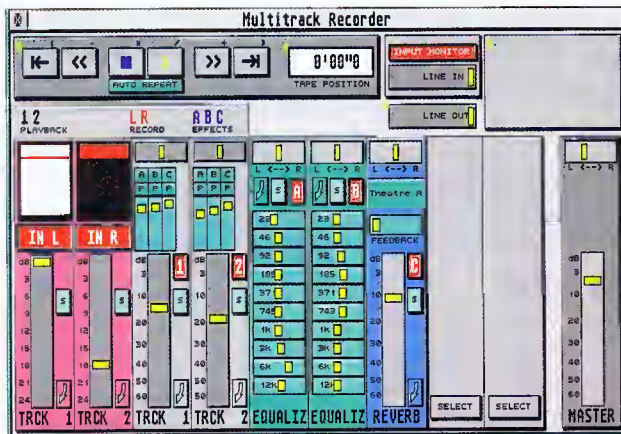
Before starting, you have to create a Tape by telling the program how many tracks you want, the sampling rate and how long the recording will be.

Something to check – there was a problem with this process with some versions of the Falcon's AHDI which controls the hard disk. These should have been sorted by now but do check with CGS before ordering.

You can record up to 32 tracks although you can only play back eight at once – a system the program calls virtual tracks. You can only record on two tracks at a time. You can link tracks into stereo pairs for editing.

You'll know that you need a large hard disk when you realise that a four-minute recording using four tracks will require 200Mb of disk.

DigiTape supports eight sample rates – 8.195, 9.834, 12.292, 16.390, 19.668, 24.585, 32.780 and 49.170 kHz – which are determined by the Falcon's hardware. The most common d-t-d rates are 44.1kHz (used by CDs) and 48kHz (used by DATs) and these will be available with Tradelt's optional S/PDIF interface. This will bypass the Falcon's internal circuitry and offer higher quality recording. It will



The Multitrack Recorder page is where most of the work is done. This set up includes Record and Playback modules, two EQs and a reverb effect

Ian Waugh takes a first look at DigiTape a revolutionary tapeless recording system for the Falcon

Direct to

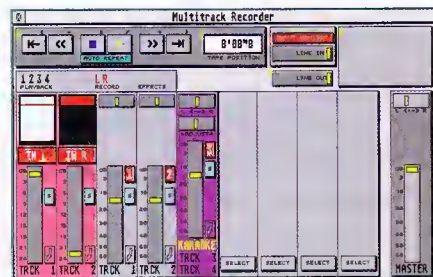
cost around £300.

The Multitrack window is where recording takes place. It contains the usual tape transport controls, a master volume slider and nine channels or module slots. These form the heart of the DigiTape record and playback system because you can insert different modules into the slots depending on what you want to do.

For example, there are Record and Playback modules which do as you would expect, plus Effect modules. Let's run through a typical recording session.

Let's say you want to record a signal in stereo. You'd assign two Record modules to tracks one and two to record the left and right signals. Using the Input Monitor, you can check the signal for volume. You can't overdrive digital inputs like tape inputs – the result is a very noticeable break-up of the sound.

After recording you can convert the Record modules into playback modules for checking. When you're satisfied you



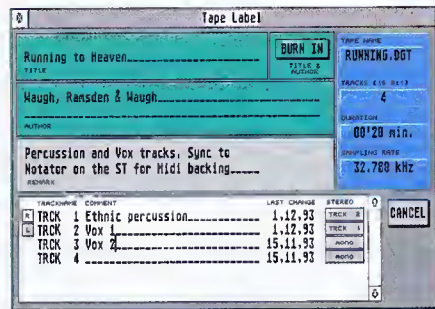
The infamous Karaoke Playback module will attempt to remove the vocal line from a recording

can replace them with Playback modules proper.

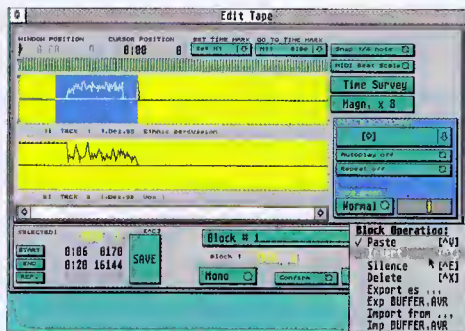
You can plug Effects into the playback chain (you can't apply effects during recording). DigiTape has seven built-in software effects – Short Delay, Long Delay, Reverb (containing 12 reverb types), ten-band graphic equaliser, Vibrato, Flanger, and a Noise Gate with Distortion – with the ability to load in more from disk.

This makes the system quite open-ended and if DigiTape catches on, additional effects modules may appear from Tradelt or third-party programmers.

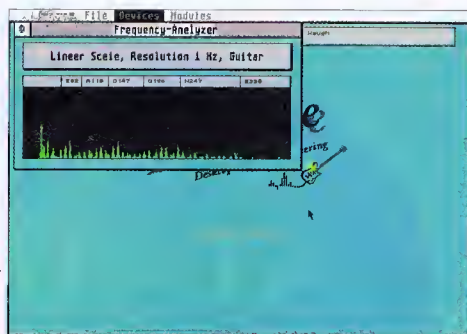
The effects are pretty good quality for a software implementation. The EQ in particular is very useful and can help compensate for some of the shortcomings of the Falcon's built-in audio circuitry. You can adjust the amount of signal sent to the FX with a volume send



You can burn author details into the file to help protect against any possible copyright problems



The Edit window lets you perform block operations on your recording



The Frequency Analyser gives you a graphical representation of the signal arriving at the In socket

control on the playback modules.

The nine module slots will probably be enough for stereo or even four-track recording, but if you want to use the program to its full ability by playing back eight tracks you may need extra slots.

These are supplied in a rather roundabout way by "hiding" existing modules and inserting other modules on top of them. It works but it's not very elegant.

Recording without the S/PDIF is from the Falcon's Mic socket although you can

d-t-d systems use a system of cue sheets which involves non-destructive editing.

Cue sheets simply involves setting up a list of sections of the recording – or cues – which the program reads and plays back in the cue sheet order. The original recording is never altered which means you can create as many mixes as you wish and the original recording is always intact.

DigiTape has several more interesting features. The Effects Online Rack processes incoming signals in real-time. It's a little like a simplified version of the Multitrack window although it only has four slots and you can only install effects modules.

The Tape Label window lets you enter track names, track comments and other details about the song – a little like a notepad. However, you can opt to burn this into the data which will help prove ownership if you pen a number one hit and someone rips it off. Not that that sort of thing happens very often in the music business, of course...

The Frequency Analyser produces a graphic display of the frequencies arriving at the input and doubles as a guitar tuner!

BARELY ADEQUATE

The manual, alas, is a preliminary affair although registered users are promised a full version – whenever it may appear. But that's not much use to someone who has the program now and wants to use it straight away. Instructions are brief and barely adequate and there are no illustrations.

The program isn't difficult to use but you do need to read the manual in order to grasp the basics. DigiTape is by no means the only program with manual problems but when you're paying this sort of money for a piece of software I think you have a right to good documentation.

If DigiTape's asking price is a little high, a cut down version called DigiTape Lite (now where did they get that name from?) is available for £149. It has fewer tracks, fewer features and no edit facilities.

Apart from the strange lack of cue sheets, DigiTape could do with a few more bells and whistles in the goodies department. Functions such as time stretching, fades, automated mixdown

and so on would make it much more appealing.

This, in turn, would help the Falcon become established more quickly as a serious music and direct-to-disk recording machine.

Having said that, even many so-called pro systems (not running on the Falcon) don't have all the facilities they should. But the good news is, most of these facilities can be added with a software update.

CONVENIENT

One problem with current Falcon d-t-d systems is that they are unable to synchronise with a sequencer running concurrently on the Falcon (with the possible exception of Cubase Audio which still has to be evaluated).

This has to be the most convenient method of combining digital audio with Midi backing tracks although with the arrival of multi-tasking software this may soon become a reality.

In any event, users who already have a sequencer or who run one on an ST could continue to use it, upgrade to a Falcon and sync it to DigiTape.

With the promise of more software updates to come, DigiTape has the potential to become one of the premier d-t-d systems for the Falcon although it may be advisable to wait to see what enhancements are made before taking the plunge.

BOTTOM LINE

FEATURES

More features than D2D's
4T/FX direct-to-disk but
needs more to be a pro tool.

Excellent
Good
Average
Bad
Appalling

EASE OF USE

Easy to use once you know
how but not helped by the
manual.

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Ouch! And if you want better
sound quality you'll have to
budget for the S/PDIF, too.

Excellent
Good
Average
Bad
Appalling

Product: DigiTape
Supplier: CGS ComputerBild, 231
Northborough Road,
London SW16 4TU
Telephone: 081-879 7307
Price: £499
Configuration: Falcon, large hard disk

disk!

also record from the left and right Master Output channels, allowing you to bounce tracks together. Unlike audio tape bounces, digital mixdowns avoid tape noise so the results are much cleaner.

One of the playback modules is called Karaoke which tries to remove the vocal line from a recording. To do this, the recording must be in stereo and the vocals must be in the middle of the stereo field.

It then subtracts the right channels from the left channel, leaving the music in mono form on the left and sending the vocals to the great phase crossover in the sky.

The Track Edit window shows the contents of one or two tracks in waveform format, similar to the display you get with sample programs such as ST Replay.

You can perform cut, copy, paste, delete and insert functions on the tracks. You can import and export AVR files which provides compatibility with other Atari sample programs and offers an easy way of moving data around.

A rule above the edit window helps sync the recording to a sequencer, say, and DigiTape can transmit Midi clock and Song Pointers.

DigiTape's edit system works fine. It's rather like working with a large ST sample program in that the edits you make directly affect the recorded data. However, the vast majority of

THE 1994 Newcastle & Glasgow ATARI SHOW

Sponsored by

ATARI
ST USER

ATARI ST
REVIEW

Yes, it's true! More super Atari shows are coming your way

Following the resounding success of our London shows we ventured out of the big smoke into Birmingham and Manchester – and met with a great response from Atari users and supporters there, too.

So now the show treks further north still. Those of you living in the Newcastle and Glasgow areas should look out for us on March 19 and 20 respectively. Keep your eyes peeled for more information in next month's issue, when we will be able to confirm these dates, the venues and provide other up-to-date information.

Each show will be attended by leading ST publishers and dealers offering the very latest software and hardware and some great bargains. We'll be there of course – *Atari ST User* and *ST Review* experts will be ready to answer your technical queries.

We'll be bringing a host of back issues at bargain prices, so you can catch up on any features or CoverDisks you may have missed. There'll be a special show subscription offer available as well. Remember to look out for more details in next month's magazine.



**FOR MORE INFORMATION
PHONE 0480 891819**

The Ultimate Virus Killer, better known as UVK, has to be one of the best supported pieces of software on the Atari platform – not only is it regularly updated as new and more devious viruses are discovered, but it gets faster and cleverer all the time.

Updates are generally released every three months but this time, with the jump to v6, the interface has been completely revamped and, perhaps more importantly, it has been redesigned to allow it to run as a desk accessory or from a command line as well as a normal desktop program.

Ultimate Virus Killer 6 is supplied on a single disk containing the program files and the manual in ASCII format. It works on any Atari including the ST/STE and Mega ranges, the TT, the Stacey and, naturally enough, the Falcon. Half a

get very few false alarms. One program it failed to recognise was Imagedisk, surprisingly enough, and the Outside virtual memory manager made it rather suspicious but it did recognise some newer utilities like Datalite, the hard disk compression program.

The lengthy statistics might seem rather daunting, not to mention meaningless, until you look at how the program works. The first and most obvious thing UVK does is to read the boot sectors of floppy disks.

It checks to see whether the boot sector contains executable code and uses a virus probability factor algorithm to assess whether it is likely to be a virus or not.

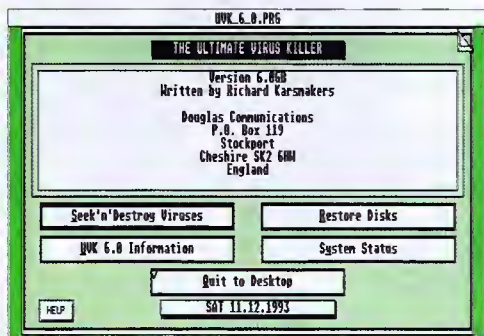
It can also compare the boot sector it has read with the 1,500 or so it "knows". Nine times out of ten the user

worked its way onto your software's original disks, even if you have made backups. You can happily kill viruses on the boot sectors of ordinary disks but most commercial games have their own special boot sectors and it is becoming increasingly common for serious software to do the same.

If you do exterminate any lurking code, the chances are you'll render the disk totally unusable. UVK knows all about this and recognises a good number of game disk and demo disk boot sectors.

If you've done the damage, there's a good chance that UVK will actually be able to restore the correct boot sector and get you back into action.

Ultimate Virus Killer is without a doubt the best virus killer you can get and despite a small increase, you get an awful lot of peace of mind for your money.



The friendlier opening screen

megabyte of memory is all that is required and the program works with multitasking operating systems like MultiTOS and Geneva. Being Falcon compatible, it also recognises and deals with high density disks.

The interface is a significant improvement over previous versions – windows can be moved on large screens and the keyboard short-cuts are far more intuitive.

For those new to the virus killing game, there are some 40 context sensitive help screens to guide you through the process. Having UVK installed as a desk accessory is a great advantage too as you can call it at any time to check a dodgy disk or a suspicious file.

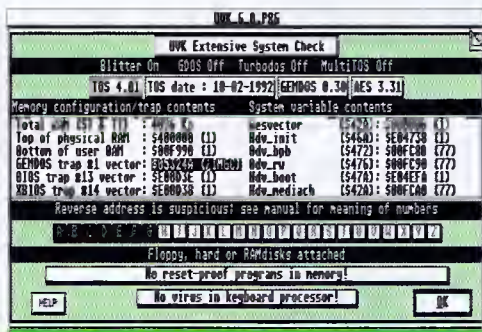
Its recognition statistics are positively awesome – it can recognise almost 1,500 different boot sectors and restore some 700 of them if they get damaged, 73 boot sector and five link viruses, 40 anti-viruses, six harmless file types and 137 "special applications".

The special applications are system enhancements and add-ons and range from proprietary hard disk drivers to replacement file selectors like Selectric and memory resident utilities like Mortimer. Some can look like viruses as they hook into the system but as UVK is so good at recognising them, you

gets a message identifying the boot sector but occasionally the boot sector isn't recognised and the program offers the option of immunising the boot sector or simply doing nothing (it may after all be an unrecognised game disk).

Other tricks include the ability to recognise some viruses that are sitting in memory waiting to pounce, repair damaged BIOS parameter blocks and scan whole drive partitions for link viruses attached to any file.

The author claims that UVK is the only virus killer that can recognise the new Beilstein virus but thankfully I wasn't able to test that claim. If you happen to have been infected by a virus it may well have



UVK's extensive system check

Six is the best

Andrew Wright cleans up with version six of the Ultimate Virus Killer

What is a virus?

It's a special type of program that copies itself into the computer's memory and then onto the boot sector of floppy or hard disks or attaches itself to existing files (the so-called link virus). Some are more or less harmless, others can seriously damage your data by erasing files or locking up the system. One of the most common viruses is the Ghost virus – it doesn't do any real damage but if your mouse suddenly starts moving up the screen when you want it to move down and vice versa, there's a good chance you've got it!

BOTTOM LINE

FEATURES

Simply the best protection for your Atari

EASE OF USE

New interface is a big improvement

VALUE FOR MONEY

Good value despite a small price rise

Excellent
Good
Average
Bad
Appalling

Excellent
Good
Average
Bad
Appalling

Excellent
Good
Average
Bad
Appalling

Product: Ultimate Virus Killer 6.0
Supplier: Douglas Communications
PO Box 119
Stockport SK2 6BH
Telephone: 061 456 9587
Price: £12.95 (upgrade £6.49),
£21.99 including next
four updates
Configuration: Any Atari

VideoMaster has been available for the ST for some time now. Its ability to allow the user to record video images in real-time (complete with soundtrack) from any video source, as well as full screen colour images, has made it very popular.

Since HiSoft's acquisition of the package through their take-over of Microdeal, VideoMaster has been brought bang up to date with some impressive improvements.

The first noticeable update is that two versions are now available, one for ST/STE computers and one specifically for the Falcon, which is the one being reviewed here.

VideoMaster Falcon (hereafter simply referred to as VideoMaster) takes full advantage of the enhanced graphics and sound capabilities of the machine.

Unlike the original VideoMaster, which only grabbed in 16 levels of grey, the Falcon version ups this to a much more respectable 64 grey levels. This ultimately means higher quality and more life-like colour images.

There are basically two ways to capture images in VideoMaster. You can record a sequence of images in real-time (albeit in mono and only a quarter of a screen in size), or you can capture full screen, static colour images.

Grabbing a sequence of mono images allows you to create some excellent animations which can run at up to 25 frames per second for real smooth and life-like motion.

Even more exciting is the fact that you can also record the soundtrack from your video in glorious 16-bit stereo at a respectable 12.292kHz, thanks to VideoMaster's built-in sound sampling hardware.

Of course, the length of animation and

sound is subject to the amount of memory available in your Falcon. Ideally, at least 4Mb will be needed for decent length animations. With the 14Mb memory upgrades available, even more can be achieved.

Grabbing static full colour images is where the best results are achieved in terms of image quality. This is because VideoMaster can use the high resolution TrueColour mode for outstanding image quality using 32,768 colours at a resolution of 640 x 400 on a broadcast monitor, and 640 x 480 using a VGA monitor.

Alternatively, you can choose low resolution at 320 x 200 (broadcast monitor) or 320 x 240 (VGA). You can also select to grab in 256 colours instead of TrueColour which drastically reduces the size of the picture file and is faster due to less data having to be processed.

At this point it is worth noting that the VideoMaster package is available in a number of configurations. As well as the two versions for Falcon and ST computers, the Falcon version is also available in two flavours.

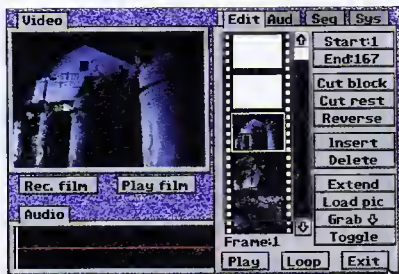
The particular package on review here is the VideoMaster Falcon RGB package, which includes an extra box of tricks called the Colourmaster RGB splitter.

Alternatively, the VideoMaster Falcon package is simply the VideoMaster hardware and software without the RGB splitter hardware, which retails for £99.95.

The electronic RGB splitter makes life much easier when creating colour grabs. It is an extra cartridge which effectively sits between the video source and the VideoMaster cartridge.

When VideoMaster grabs a full screen image from a video source, it actually

Darren Evans checks out VideoMaster Falcon RGB, a low cost multimedia package allowing full colour video digitising and 16-bit stereo sound sampling at once



Editing film sequences is very intuitive, with the ability to cut and insert individual frames

grabs three separate images in 64 shades of red, green and blue. These three separate images are then mixed within VideoMaster to create a full colour image.

In the VideoMaster package without the RGB splitter, you would have to manually grab the three separate red, green and blue images by selecting the appropriate buttons from the menu screen. Then you would have to merge the three images to get the full colour picture.

The RGB splitter totally automates and considerably speeds up this process by using electronic methods making the whole thing much easier and more convenient.

Setting up VideoMaster is extremely easy. The hardware consists of an L-shaped box which plugs into the Falcon's cartridge port. This box also includes controls for adjusting the brightness and contrast of the incoming signal as well as a phono socket for connecting your video source (VCR or camera).

PICTURE CONTROL

The RGB splitter itself also has a picture control for brightness and a phono socket to connect your video source to. It is important that you first check that your video source has the necessary video outputs for connecting to external equipment.

Most VCRs and video cameras have a phono Video Out socket (also known as an RCA connector), but some may have BNC or S-Video sockets, for which you will need suitable adaptors to connect them to the phono connections of the VideoMaster hardware. These should be available from most local hi-fi and video stores. With the

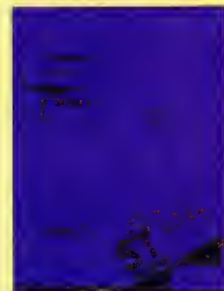
Colour trickery



First step in creating a colour picture is to grab the red image...



Next, throw in a little bit of the same image in a nice shade of green...

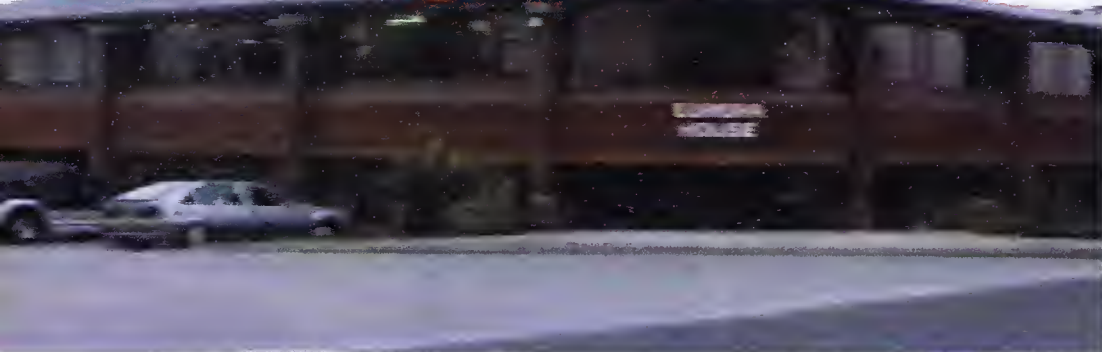


Then, a smattering of the final colour in a cool shade of blue and we're almost ready...



Finally, all three images are merged to produce the full colour picture

Talking pictures



This picture of ST User H.Q. was created with VideoMaster Falcon RGB

VideoMaster cartridge, RGB splitter and video source all connected, it is time to run the VideoMaster software.

This is where all the fun begins. At the click of a button, you can record animations, complete with sound, from any of your favourite videos, or, you can embarrass anyone within range using your video camera.

I say embarrass because once you have an image of a friend, you can then load the image into HiSoft's True Paint art package which comes free with VideoMaster. You

with 14Mb.

An audio adaptor lead is supplied with VideoMaster and is plugged into the Falcon's microphone socket. The lead then provides two phono sockets to allow you to connect the audio output of the video source to the Falcon.

The lead also "steps down" the signal strength of an audio source coming from an amplifier, which left alone can damage the internal audio circuitry of the Falcon, so don't go plugging your audio leads directly into the computer!

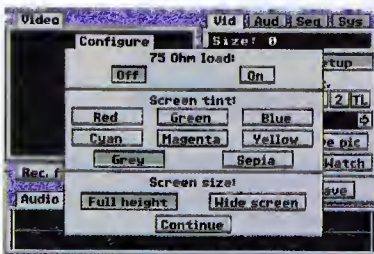
When recording video images and audio simultaneously, VideoMaster has a preference screen which allows you to alter the amount of memory assigned to both the audio and video buffers.

GREAT IMAGES

Although VideoMaster can create great looking images, the quality of such images can be marred unless you have the right video equipment and leads.

If grabbing full colour images from a video, the VCR must have a good pause facility. When in pause mode, some older videos tend to have a jerky display with interference lines streaking across the picture. This will obviously make for a very poor quality grab. Such a problem may be overcome by adjusting the tracking of your video.

More modern videos which have digital tracking features or digital freeze frame are ideal in that they have very stable images when paused.



VideoMaster even allows you to select the screen size to accommodate those videos recorded in widescreen "letterbox" format

If you intend to record something onto a videotape and grab from it, be sure to record in short play (SP) mode, at least on VCRs with twin speed settings. Anything recorded in long play, when paused, will probably lose the colour giving you a black and white paused image.

Another important fact to remember is that the correct cables should be used to connect your video source to the VideoMaster cartridge.

Although a video lead is included, it is not very long. Most people will probably not have their VCR in close proximity to their Falcon, so you may well end up buying longer ones. If so, be sure to visit your local dealer for good quality video leads.

VideoMaster Falcon RGB is outstanding value for money which can produce equally outstanding animations and colour images. The manual is very well written and presented, covering everything from setting up the hardware to tips on how to get the best images.

Hopefully, if sales of VideoMaster are successful, HiSoft will contemplate doing an upgrade that will digitise in 256 grey levels for the ultimate in image quality.

BOTTOM LINE

FEATURES

The VideoMaster software provides lots of functions for easy editing of both video and audio.

EASE OF USE

Simple and quick to set up with excellent documentation containing lots of tips on how to get the best from the package.

VALUE FOR MONEY

Great quality images at an affordable price, with the powerful True Paint art package thrown in too. Awesome.

Excellent
Good
Average
Bad
Appalling

Excellent
Good
Average
Bad
Appalling

Excellent
Good
Average
Bad
Appalling

Product: VideoMaster Falcon RGB
Supplier: HiSoft
The Old School
Greenfield
Bedford MK45 5DE
Telephone: 0525 713671
Price: £139.95
Configuration: Falcon only

As you can see, the high resolution colour mode produces some tasty pictures can use it to manipulate and edit any of the images grabbed using VideoMaster – an awesome combination.

As mentioned earlier, grabbing both animations and still frames is simply a matter of clicking on a button. With animated sequences, each frame is stored in memory and the editing section of the software enables quick and intuitive editing of each separate frame.

The actual frames are shown as a "film strip" type display which shows five frames at once that can be scrolled through using a slider bar and scroll arrows.

The audio capabilities which VideoMaster offers are equally as impressive as the graphics.

Sound samples can be recorded in 16-bit at a fixed speed of 12.292kHz, which is not exactly the CD quality which the Falcon is capable of, but then again, the amount of memory which higher frequencies would consume would make for extremely short animations, even

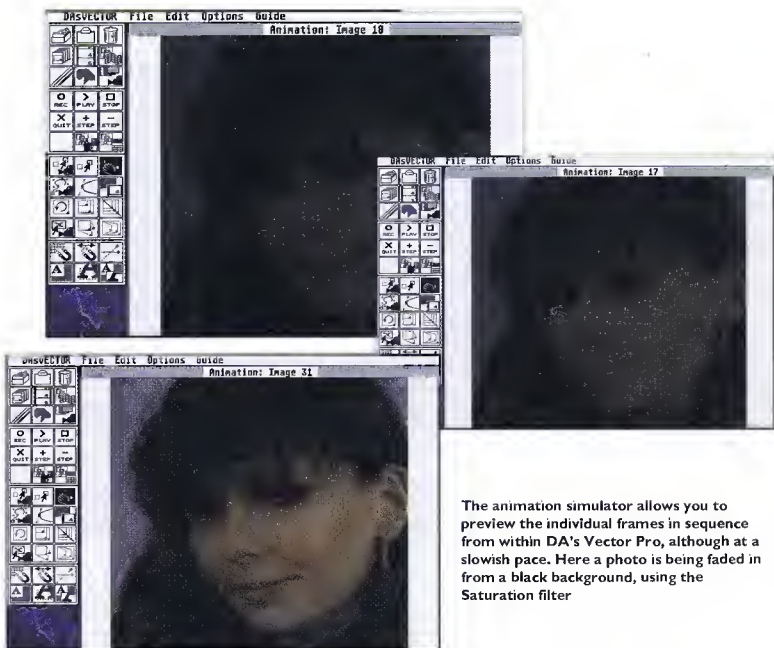
On original release DA's Vector quickly established new standards for graphics software on Atari computers: Indeed, I have seen a few hardened PC illustrators experienced in the use of the legendary Corel Draw go pale at watching some of the things it does.

Before looking at its latest incarnation, DA's Vector Professional, it may therefore be useful to remind ourselves just how revolutionary the original program was.

DA's Vector was the first outline art program on the ST/TT to use colour. Full 24-bit TrueColour – or 16.7 million colours – that is, more than the human eye can ever hope to cope with.

Even the humblest ST could take advantage of this, irrespective of its monitor display, provided it had a colour output device connected to it. Even more impressively, to my mind, was the way that DA's Vector crushed through the barrier that had traditionally separated vector from bit-image or pixel graphics – any colour picture could now be turned into the “fill pattern” of a vector object and thus breathe natural textures into the previously cold world of computer object art.

And all these colours and textures –



The animation simulator allows you to preview the individual frames in sequence from within DA's Vector Pro, although at a slowish pace. Here a photo is being faded in from a black background, using the Saturation filter

DA's big brother

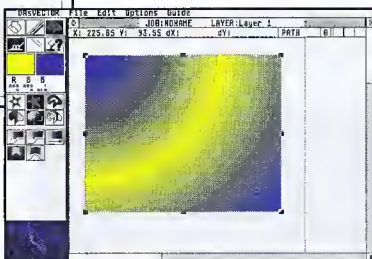
plus the text in PostScript or Calamus fonts – were available not only for static illustrations but animated graphics as well; the genesis of a completely new approach to the creation of cartoon films.

The success of the Atari TT (which was never seriously marketed here by Atari UK) certainly had a lot to do with

DA's Vector, widely acclaimed as the best outline art package for Atari computers, has acquired a Professional stable mate with much-enhanced capabilities. Something for Günter Minnerup to get animated about



The autotracer can now handle mono images in the TIM format (conversion from IMG is provided for) – it works extremely well and is ideal for creating masks and fill patterns in addition to “ordinary” vector objects



The Area Fill menu has acquired several new capabilities, including the definition of vector colour graduations. The start and end colour as well as the graduation type are easily selected with a few mouseclicks

this, as the TT's 68030, 32MHz processing power and colour VGA monitor provided a suitable platform for these new developments.

By the same token, the graphics and sound capabilities of the Falcon 030 were clearly the reference point for the development of DA's Vector Professional, since most of the further enhancements are targeted at the video production market. Above all, DA's Vector Pro is DA's Vector for animation artists.

The chief advantage of using vector graphics for animation is that it is not

necessary to edit all frames by hand: the computer can do much of the work for you.

For many purposes, only a few keyframes need to be prepared by yourself, and if you place these at suitable intervals on the film strip, DA's Vector's animator will calculate all the intermediate frames by interpolation.

The new, professional version takes this a great deal further by implementing a number of powerful features – the camera is no longer fixed in position and size but can be scaled up or down to zoom in or out, can follow a Bezier curve path for all or part of the film.

Since the multicopy function and the calculator are also available inside the animation editor, even the generation of keyframes can be much simplified by letting the program multiply an object, scale it, rotate it, cycle through colours and fill patterns, or apply various mathematical formulae for special distortion and projection effects.

Movie compiler now also supports sound tracks and the Player program is

capable of rendering sound samples in AVR format.

The automatic fill pattern change in the multicopier is worth a special mention. As fill patterns can be pictures – mono, halftone or colour – the changing fill patterns generated by the multicopier can be individual frames of an already existing animation, provided these are available as single pictures with sequentially numbered filenames.

They can be assigned as fill patterns to objects of any shape, of course, and the multicopier enables you to enlarge, reduce, rotate or move them, making them fly through space, perhaps.

The possibilities don't end there, because the multicopier now also gives access to the calculator, so that the copies can be distorted in the process. The calculator in the Professional version features a special variable "I", to which individual pictures numbers can be assigned, thus giving very precise control over the effect of such transformations.

Using all these new options to their full potential requires some understanding of the processes involved and considerable practice if you are a newcomer to animated graphics.

Another major enhancement, the filter functions, are more intuitively understood by those who may not aspire to full-scale cartoon movies but are happy to produce impressive slide shows, perhaps for shop window or show display.

The filters resemble the fill patterns and the new filter dialogue is indeed very similar to the fill pattern dialogue. Two of the filter functions – Saturation and Luminance – work by gradually transforming the colours of a picture on one layer of the film track, depending on the filter picture chosen.

The Grizzle or Threshold filter fades in the picture in randomly distributed pixels, gradually getting denser until the full picture is visible.

There are many other improvements for those who use DA's Vector simply as an extremely powerful vector colour graphics tool without ever venturing into the world of animation.

At the input end of things, I have already mentioned the new ability to import mono pictures into the auto-tracer. These are now therefore also available as fill patterns in a much improved area fills editor. New icons offer graduated vector fills with a choice of algorithms, as well as so-called "blendings".

These produce smooth transitions between two or more subpaths in one path object: a minimum of nine and a maximum of 255 intermediate paths, each representing a step in the transformation of, say, a triangle into a square. The program will interpolate not only the shape of the paths, but also their colours.

One of the most versatile functions in DA's Vector has always been the Bezier grid transformations, allowing you to project an object onto apparently 3D Bezier grid shapes. Some such Bezier grids are supplied with the program and could always be modified and saved by



In this example from the animation simulator, a photo is gradually assembled from randomly distributed pixels using the Grizzle or Threshold filter

the user, but now you can maintain several different Bezier grid libraries, much as you always could with object and path libraries.

Finally, on the output side, there is the long awaited PostScript driver. It would be nice indeed if there was also an option to import Encapsulated PostScript clip art, but PostScript export is at least one important step in the right direction of greater file portability, especially for those who need to employ output bureaux for high-quality hard copy of their artwork.

CLEAR IDENTITY

With the Professional version, DA's Vector is at last carving out a clear identity for itself in relation to the superficially similar DA's Layout (aka Didot Professional) from the same stable.

Both have very similar functions and user interfaces, but while DA's Layout is clearly aimed at the DTP market, DA's Vector Pro is unambiguously targeted at the video industry. The processor speed even of 68030 computers such as the Falcon and TT still imposes some restrictions: animations involving large colour formats and most of the new filters, for example, cannot be replayed inside the computer at real time and need to be recorded to video frame-by-frame.

Having quoted the upgrade manual, I must admit to being slightly puzzled by the very existence of such a manual. One of Digital Arts' proud achievements is the Knowhow on-line manual system,

which loads as a desk accessory and gives instant access to the relevant chapter of the documentation from anywhere within the program.

As it happens, I rather prefer a traditional handbook anyway, but since easy upgradability was given as one of the main reasons for the on-line system in the first place, I am nonplussed to find myself holding a laser-printed explanation of the new functions and reading an unamended on-line manual. This is irritating, even if it does not distract from the sheer power and quality of the software itself.

BOTTOM LINE

FEATURES

Walt Disney would have loved it!

Excellent
Good
Average
Bad
Appalling

EASE OF USE

As easy as animation could be expected to be.

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Dirt cheap for the professional, affordable for the amateurs.

Excellent
Good
Average
Bad
Appalling

Product: DA's Vector Professional
Supplier: CGS-ComputerBild, 231 Northborough Road, Norbury, London SW16 4TU
Telephone: 081-879 7307
Price: £199
Configuration: All ST/TT/Falcon in any resolution

**THE BEST FOR ST AND
FALCON 030!**

THE ATARI FALCON

At New Age PDL we are supporting the new Falcon 030 101%. We currently have a huge stock of Falcon specific and enhanced software all on High Density (1.44 meg) disks. We also fill these disks to capacity wherever possible to give you the best possible value for money. We now have a dedicated Falcon catalogue containing loads of free software including utilities, demos, music and a game. This catalogue is **COMPLETELY FREE** to new customers with your first order – just ask for it.

ALL FALCON DISKS

£1.75 EACH

**ONE FREE WITH
EVERY 4 BOUGHT!**

FALCON ART & GRAPHICS PROGRAMS

- FAIC 1 - PDV Roctracer, fully zipped, expands to 3 meg of hard drive space!
- FAIC 3 - Birdy 2 Animation (4 meg), vif file, Crawl & Tackle Master demo.
- FAIC 8 - Cardinal DSP, Frodo Zlocos, various IFF, RAW & TGA videos, Bit Camera for altering raster images, Speed of Light 2.6, F-Point, Chagol demo, Slideshow.
- FAIC 16 - Lexicon demos (zipped): Chromas 1.2, Phoenix 0.91, Prism Point 1.0.
- FAIC 37 - Landscape game, Gemview 2.48, Delirium, Gio Gif, Binars 2.0 + more!
- FAIC 95 - Geetch - plane/generator, Nocturne, Pixel Studio demo + more!
- FAIC 98 - Xload demo, Overlay demo 1.03 (zipped), Fixat demo 1.02.
- FAIC 102 - Glavex demo 1.1, View XGA, IMG converter.

FALCON PICTURES & ANIMATIONS

- FALC 31** - Temptation! The first disk of an **EXCLUSIVE** pack of JPEG pictures of gorgeous girls. Excellent quality pictures and the three disk pack contains no less than ninety pictures! Yes! NO! Disks 2 & 3 in **FALC 32 & 33**.
- FALC 34** - The Chippendales Auditions. This time a disk of gorgeous boys!
- FALC 38** - FU Animations: AS Lamp, Balloon, Bar, Glass, Hands, Bounce 2.
- FALC 39** - FU Animations: A3DS, Apple, B Ball, Bugs Bunny, Chubb, Cone, Tigercat
- FALC 85** - Starfreak Pictures - JPEG's of just about all series.
- FALC 87** - Bad Pictures in JPEG format. 27 pictures in all.
- FALC 88** - Dog Pictures in JPEG format. 43 pictures on all varieties of dogs.
- FALC 89** - Animal Pictures - the first of three disks of all sorts of mammals. [EPGSI]
- FALC 99** - Car Pictures in JPEG format - Ferraris, Porsches, Lambos, Mercedes etc.

FALCON DEMOS

- FA1C 6 - Cebit '93 (RGB), 1600x600, 3DT, Poragon, Convection (RGB SuperB!)
- FA1C 9 - Grotesque (Excellent!), Gourad, Speeder, Plasma 30 & 50, Intel + more!
- FA1C 11 - Morphing demo - requires 2 Meg memory + hard drive space. + 3 more!
- FA1C 27 - Left Donut by Griff (RGB), EKO (RGB - Outstanding music!), Big Digi.
- FA1C 96 - When Dreams Become Reality (RGB), Warum (RGB), Inconvex (RGB).
- FA1C 97 - Fuli Pro animation - Zined requires 2 meg memory + hard drive space

FALCON MUSIC RELATED PROGRAMS

- | | |
|--------|---|
| FA17 C | Fortitude for creating cities, ProTracker 2, TCB Tracker, Despatcher 1.11 |
| FA17 F | Wines 1.35 [220], Wincul for editing Wines samples, Haratcho (220) |
| FA19 C | Star Trek Cities for Fortune, Dante - Digital Audio Multitasking Editor |
| FA19 F | System Audio Manager 1.1 - ossion samples to events, Digipate 2 demo |
| FA19 G | 49 Wav samples for System Audio Manager |
| FA19 H | Another 41 Wav samples for System Audio Manager |
| FA19 I | ProTracker 50KHz modules: Come & Get me, Pussy, Triptate, Hardcore etc. |
| FA19 J | As above: Freedom's Dreams, Goodbye, Happy, Inital, Journal + 5 more. |
| FA19 K | As above: Watch Your Bass Spin, Boom And She Cums, Fin + 4 more. |
| FA19 L | Muzick - Huge sound player program. Zippped, expanded to 2 meg. |

FALCON GAMES

- FALC 21 • Humans Demo disk 1. Zipped, expands to 3 Meg. Disk 2 on FALC 22.
FALC 35 • Netbook 3.1.1 - 2 Meg memory+. Brilliant dungeons and dragons game.
FALC 103 • Oxyd (excellent), Des Lasers et Des Hommes (3D shoot em up), Masters of Chaos (Dungeon Master clone), Tron, Ishar Editor, Mario Kart demo.
FALC 104 • Spacola (RGB) - great space shoot em up, Madtris (RGB) - crazy Tetris!, Vertical Rhythm (RCR) - nice version of Columns.

FALCON UTILITIES

- | | |
|---------|--|
| FALC 2 | - Falcon boot 1.2, Backward 2.23 (ST emulator), New Depack, Text Files, Desk Copy, Despic 1.05, Sysinfo, Multi Dialogue, Ck Xtrac 2.1, Revive |
| FALC 15 | - 45 assorted Mini/Multi/OS utilities + extended colour icons |
| FALC 28 | - X Control 1.2, Clock 2.0, Edison screen saver, Mini FS 0.55, Magic Boot |
| FALC 36 | - RDE 3.1, Tassin 1.4, Loe 2.22, Eopy 1.1, Zip 2.3, Genc Bench 3.25, Good Backup 1.33, Boot Init 1.1, Zoozy 1.5, Fcontrol, Sghul 1.3 |
| FALC77 | - Emocs 3.11, Everest 1.5, KM Term, Atomic 3.5, X Menu 1.3, Profile 1.43, Restorator 1.1, GRCB (chip set on VGA), Program 1.1, Filipes 1.01, Swashes |

THE ATARI ST/STE

New Age PDL is now in it's third year of business supplying top quality ST/E software. We now have over 1500 disks of some of the best PD, Shareware and Licenseware to suit all tastes. Just look through our advert at get on idea of the huge range that we carry. Our disk based catalogue describes every single program in detail, has a beginners section and is very easy to use - it's also COMPLETELY FREE to new customers! Just ask for it, there's no need to send any disks or SAE's. If you are an existing customer and you would like an update then send back your disk with a stamped SAE.

HIGH RESOLUTION GAMES

- | | |
|----------|--|
| GAME 1 | Andrew, Elminster, Gargano, Gilgoad, Mini Golf, Bubble, Runner, Space War, Tetris, Play Thing, One A King. |
| GAME 8 | Diamond Boulderz, Invaders, Maggon, Megaroids (Asteroids), Minemeld, Millie, Murray, Solari, Spreng. |
| GAME 28 | Pyramid, Escapade, Sokoban, Cube World, Battleships. |
| GAME 30 | Air Traffic Control, Go Board, Munchers, Pong, Puz, Trivia, Go Up. |
| GAME 33 | Boat (Excellent boardroom game), Super Breakout, Baseball. |
| GAME 34 | Point & 2 - spoof Zork type adventure games, Enchanted Realms. |
| GAME 36 | Net Hack V2.3, Scribble, Sherry, Check, Checkers. |
| GAME 37 | Carom Fantasy Role Playing Kit, DDG - dungeons and dragons. |
| GAME 39 | Jeopardy, Jeopardy, Airline Manager, Jeopardy, Jeopardy. |
| GAME 50 | Jeopardy, Jeopardy, Jeopardy, Jeopardy, Jeopardy. |
| GAME 70 | Jeopardy, Jeopardy, Jeopardy, Jeopardy, Jeopardy. |
| GAME 112 | Risky Construction Set, Roulette, Yacht, Yachtgammon, Poker, Kai Gow. |
| GAME 125 | Cyale Dots Poker, Deano, Cribbage, Teatit, Fast Poker. |
| GAME 168 | Novelty - a 'Risky' style game of war and strategy. |

COLOUR GAMES

- GAME 1: A Question of Snakes, Fin, Parab, Daveslayer, Roll n Nudge, Ranger,
GAME 68: Squeaker, Fruit Machine, Pin Game, Rocket Ball
GAME 69: Poppyeap - a pop music game with an adult theme.
GAME 76: Ballisticscape - ballist - brilliant innovation on the Tetris theme.
GAME 83: Grandad & the Holy Vey - superb animated adventure. 1 Meg.
GAME 94: Hoornan 2 [1] Meg[4], Dungeons, Wheel of Money 3.
GAME 104: Blast - A very nice version of Tetris. SEI ONLY.
GAME 105: Infiltration - 3D game, Ozore, Atomix Rocknroll, Greet'shoop 'em up.
GAME 117: Fast Freddy - low platform game with superb graphics.
GAME 121: Darkkyle - great isometric 3D war strategy game similar to Heru Quest.
GAME 122: Last Arcadeon - by grandad - a superb adventure, 1.6 meg. 1 Megabit Mega-
GAME 123: The Great Escape - a superb adventure, 1.6 meg. 1 Megabit Mega-
GAME 26: Dragon Lord - a superb adventure, 1.6 meg. 1 Megabit Mega-
GAME 37: Glast-buckit of Thurg - some of the land from the butch! - 1 Meg.
GAME 132: Psycho Pig - a 3D platform game, very cute. £3.00.
GAME 135: Grey Matter - difficult brain teaser from OCS, SPI, Paravict, Galactic.
GAME 136: Chops 1/2 Meg - classic spectrum game converted. 1 meg on

- | | |
|----------|---|
| GAME 139 | • <i>Grandad II</i> - the sequel to <i>Gone With the Wind</i> on 2 disks 1 Meg+. £3.00. |
| GAME 143 | • <i>Brain Damage</i> - the biggest, most difficult brain teaser yet form DCS. |
| GAME 147 | • <i>Freaked Out</i> - nice puzzle game. Shift it [1] Meg+ - another good puzzle. |
| GAME 148 | • <i>Operation Blue Sunrise</i> - massive STAC adventure game. 1 Meg+. |
| GAME 150 | • <i>Course Angler</i> - 1.02 - go jackie fishing on your S7! |
| GAME 151 | • <i>Sim Pig</i> - a brilliant pig farm simulation! Like <i>Sim City</i> & <i>Sim Earth</i> . |
| GAME 152 | • <i>Wormhole</i> - nice vertically scrolling shoot em up with slick graphics. |
| GAME 154 | • <i>Midi Zap</i> - multi-player asteroids. A highly suspicious Aquarium. |

- | | |
|----------|--|
| GAME 157 | Hockey |
| GAME 158 | F-16 - built the buildings; F-16 - very good flight game, 8 missions. |
| GAME 159 | Wingman II - flying through the clouds, great graphics, but like X-Wings |
| GAME 160 | Battle Ship - lots of ships, lots of weapons, Entombed - more platforms |
| GAME 161 | Theme Park - Mysteries + Castles, Kill everything, Sumario |
| GAME 162 | The Obscure Nantact - STAC adventure with lovely graphics, 1 Meg. |
| GAME 163 | Quiz Master - quiz that actually has answerable questions! STE only |
| GAME 164 | Nirvano - platforms, Fun Logic, Maze, Chain Reaction - columns. |
| GAME 165 | Megapole - four player Fun/Light Cycles, Insectoid, Gobs in Insectoids. |
| GAME 166 | Magic Moon (maghi), wizard game - 3D CK games |
| GAME 167 | Ogre (megal) - puzzle/puzzle/grand game, Duck Dash |
| GAME 168 | Star Trek - Star Trek, Star Trek, Star Trek |
| GAME 169 | Bludge 10vaders - uses hardware scrolling, stereo sound, STE only |
| GAME 170 | Laboratory I - a fantasy role playing with full colour graphics |
| GAME 171 | Fateaster - super arcade adventure/dungeons and dragons |
| GAME 172 | Arcan. Out, Cocodemmo Bank, Pyramid, Dick Hunt, Strike, Turbo, Wojo |
| GAME 173 | Pumper, Plumber, Planet Mon, Utopia, Yastion - 13 games! |
| GAME 174 | Asteroid, 3g, Battle, Bellum, Quiz, Blastin', Chunks, Europe, |
| GAME 175 | Exploide, Xplode, Insects, Measoids, Micra, Ocotato, Othello, |
| GAME 176 | Plan, Plan, Plan, Rock, Rock, Rock, Rock, Rock, Rock, Rock, Rock, |
| GAME 177 | Wayz, Wayz, Deep, Lur, Football, Horror, Goo, Slime, Horrified House, |
| GAME 178 | Insects, Jupiter, Room, Storage, Deade, Xyz, Zym, Firestorm |
| GAME 181 | Aaron, Windyway, Violence, Ozona - 4 brilliant apps! |

BUDGIE GAMES - £2.75 EACH

- BUGAM 83 - Cyberstorm, a very slick Defender game, really fast!
 BUGAM 89 - Horse Racer Simulator for 1 to 5 players. Buy/sell and bet!
 BUGAM 100 - Clad Hopper - lovely version of Monic Miner from the 8-bit days.
 BUGAM 104 - Jetpack - another faithful clone of a classic Spacey game.
 BUGAM 113 - Football Tactician - formerly a £20 release! Excellent!
 BUGAM 119 - Football Tactician - the Premier League 92/93 season.
 BUGAM 120 - Dungeon - traditional black & slash game written in Telespin
 BUGAM 121 - Super Scramble - take a trip to the 8-bit days with this shoot 'em up

POWERFIST GAMES - £3.00 EACH

- POWER 1 - Snort 93 - previously commercial playable platform game. 1 Mega+ 512K PowerPC 11
- POWER 2 - Grailo One - four levels of alien blasting chaos.
- POWER 3 - Seven Galaxies - extremely slick shoot em up, one of the best so far.
- POWER 4 - Hunchy 1066 - great block in time with some artillery for this classic!
- POWER 5 - Deluxe Nastrag - superb pit screen arcade adventure. 1 mega.
- POWER 6 - Deluxe Nastrag - the 1/2 mega version.
- POWER 8 - Power Cut - fly around globe ship up with 25 power bases to destroy! Last Rating in the 25th Century - great console style game.
- POWER 9 - The 13th - a very good 3D platform game, one of the first 3D games.
- POWER 10 - Cosmic Castles - wonderful platform game set in a haunted castle.
- POWER 15 - I've Lost My Marbles! - Huge adventure written in STAC.
- POWER 16 - Enraged Out 2 - the sequel to the great PD puzzle game.

ADR GAMES COMPILATIONS

ADR are a group of coders who take popular PD games, compress them so that loads can be fitted onto one disk and then put them onto a nice menu so that you just have to press one button to load them. These disks represent outstanding value for money of just £1.50 each!

- Galaxion, Grav 2+, Kubes, Plop, Spacemar, Mego Depack 2.12
- ADR3 - Balls, Violence, Kid Kong (1 meg+), Happy Pac Worm, Umatron
- ADR7 - Grandad (1 meg+), Grandad 2 part 1, Critical Mass, Turbo
- ADRB - Grandad 2 part 2 (both parts needed), Prensum+.
- ADR9 - Rush 2, H-Mac 2 (STE), Ozone 2, Blob Race, Breakout+, Atomik 3.6
- ADR10 - Super Dark Pearl (1 meg+), Operation Golfied (STE), Nirvana (trained), Pacmar (STE 1 meg+), Teserae

FOOTBALL TACTICIAN 2

The most up-to-date football strategy game ever! Yes, all the program data is updated every week! FT2 puts you in complete control of every detail of your game plan - change tactics, make substitutions, adjust formation, mark players, inspect possession at any point in the game but watch out for the first ever real referee intervention! Up to 46 players, a massive database with complete details of every match going back 20 seasons. You'll never want to play another football game after Football Tactics 2!

£22.95

ART & GRAPHICS

- ART 1 - A disk full of 23 miscellaneous utilities including viewfig 1.2.
 ART 51 - Crackmap 1.36 - latest version of the best ST art package! 1 Meg.
 ART 128 - Megamem 2.48 - new version of this superb memory converter.
 ART 157 - PAD 2.4 English version of this high res drawing package. 1 Meg.
 ART 172 - Paintshop Plus 4.03 - A commercial quality drawing package.
 ART 180 - Paintpot - on volume commercial painting package which was £15.00
 ART 187-196 - Temptation! Ex 1 - the first pack in a whole new range of top
 quality pictures of tempting girls! Two versions (please state which)
 one for STEem and one for STE which takes advantage of a 32,768
 colour palette! EXCLUSIVE to New Age PDU! Ten crammed disks at just
 £12.50.

DEMOS

- DEMO 339 // -STAY! Hit Kaien Plan Demo
 DEMO 337 // Trac' in Trac' in der Stadt von Bremen (2 disks) 1 Meg+ £3.00
 DEMO 335 // Rapilly Is A Lie Demo 1 Meg+
 DEMO 334 // Aladdin Demo - short animation with sound. 1 Meg+
 DEMO 328 // Ambience Demo by Chaos
 DEMO 325 // Perpetual Down Demo. 1 Meg+
 DEMO 322/324 // T.N.H. Megademo. 2 disks £3.00
 DEMO 320/322 // Froagies Over The Fence - Three disks! 1 Meg+ £4.00
 DEMO 316 // -Grumbler In A Ruffing Session Demo
 DEMO 314/315 // Coding So Far Demo. 2 disks £3.00
 DEMO 313 // Relapse Demo - Three disks. STS Only! £4.00
 DEMO 311 // Ecstasy - 2 disks, 2 brilliant STS demos
 DEMO 303 // Erotica by Madonna. 1 Meg+
 DEMO 300 // U2 Get 2! The Music by Cappella [excellent!] 1 Meg+
 DEMO 298 // I, the Mission Control Mix by Haddaway. 1 Meg+
 DEMO 292 // What Is Love Passion Mix by Haddaway. 1 Meg+
 DEMO 283 // Mr.Vain by Culture Beat - the smash hit Euro single. 1 Meg+
 DEMO 276 // 5/05 - a great STS 12" demo by Percy of Light
 DEMO 274/275 // Dreamzone - the latest megademo from the Wild Boys. £3.00
 DEMO 270/272 // The Omikron Megademo - 'tunes up 3 disks! 1 Meg+ £4.00.
 DEMO 264 // Romeo, Petri Papa! Neo, Simul Simul. STS only demos.
 DEMO 261 // Brain Freeze - Trancopile STS and 1 Meg only demo.
 DEMO 251 // The Sound of Silence - the ultimate parcel of techno music.
 DEMO 247 // Almay! Demos L2 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717,

SOUNDTRACKER MUSIC

- TRAC 115 - 2 Unlimited Rock, Lost Forever, Moonchild, Techno '93.
TRAC 114 - Acidpaw Delight, I Feel Love, No Limit, Popcorn, The Scene, 1993.
TRAC 113 - Boom! And She Cums! Do Ya Trust Me? Know What To Say. STE only.
TRAC 111 - Empty Spaces, Talk your Tym, Listen 2 The Rhythm, Hardcore. STE only.
TRAC 110 - Midnight of Noon, Watch Your Bass Spin, Hardcore Hypno 4. STE only.
TRAC 105 - Alright, Dirt Trip, Juicy, Moody, Two, Mod 3 (Techno Tunes).

NEW AGE PDL (DEPT STU15), P.O. BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD TEL: (0702) 526435

£1.50 EACH **New Age PDL**
Unless otherwise stated

UTILITIES (ANY RES)

- UTL 2 - Starling, Head Start 1.1, CD Clock, Head Back, Hard Disk Units, Ram Disks, Hook 'n' Copy, Turtle 3.0 (CD Hook), Megamem, Memory Test.
- UTL 3 - ST Almnace, Class 3.0 - combinatorial spreadsheet - database for teachers, Treasures - prints several pages on one to save space - good for long docs.
- UTL 4 - Pops 2.5, ST 3.14, Swither - loads programs faster, 20 D0 utilities.
- UTL 5 - F-Copy, 3.2 (CD Show), Disk Manager, Disk Scan, Mono Emulator 5, Spool, CD Shifter (loads 32 copies), Speech Synthesizer, Mouse Accelerator.
- UTL 6 - James the Blob, London Phone Codes, MenuSYS, Pinhead, Super Calendar Batch Processor, Auto Start, Postmaster, No Bombs, E-Disk, 9 Quick Utilities.
- UTL 12 - Jan Packer 4, Wind X86 (Modulator control panel), Setfile 4.01, Clock Set.
- UTL 13 - German to English translator, lat Print, CD Salvage, MIT, Maccel 3.0.
- UTL 14 - Printer Drivers in Canon BubbleJet, Joga Daisymatic, Brother + Epson.
- UTL 15 - Calculator, D-Copy 3.08, Directory Printers, Guardian Virus Detector, Label Maker, Recover, Search Editor, Virus File, CU, Dirty, Reboot, MouseDriver.
- UTL 16 - Chameleon - loads and unloads accessories without having to reboot, Sticker 3.0 (mono only), Defining File Selectors, Super Virus Kill, Benchmark.
- UTL 19 - Your Second Manual, Jokes, GDOS into Bombs into + several magazines.
- UTL 30 - Superboot 8.1, Build Your Own Scanner, Report Writer, Disk Cleaner.
- UTL 33 - Cheats 1.1 (high speed copying utility), Rainbow TOS patches, Unzip 2.2.
- UTL 38 - Printer Drivers: Intel iXP2, 124, ST, i486, NEC Pinwriter, Brother Canon, Citizen, HP Deskjet, OKi, Qume, Tuxton, Toshiba, Remington.
- UTL 40 - loads of patches in: Atomik 3.5, Automation 3, Dragon 3, Fire 2, Ice 2.4, Pampy 1.9, Speed Packer 2, Branch Always Packer + Multi-Disk Packer 1.5.
- UTL 42 - Kase Dots - pictures, prints, prints, clocks and music together. Colour only.
- UTL 45 - Kase Dots 2.01 - Term Dots - 256 colour, 256 fonts, 256 backgrounds.
- UTL 46 - STOS Shop 2 - house building kit 0.6 - colour.
- UTL 51 - Form Finder 2 - no basic range predictor which is a csky to use. Colour only.
- UTL 53 - TOS Version 1.0 - allows you to run programs that don't run on your TOS.
- UTL 54 - Message Recorder, Archiver, Shell's, Evolve Printer Demo, Mega Recorder.
- UTL 55 - Spectrum Emulator 1.2 - run Space games - includes Habbt, Mini Miner.
- UTL 57 - Revenge Doc Displayer 3.0, WordSmith 3.0, Desktop Kit configurator.
- UTL 58 - Career: Themes Inventory and Personality tests - great fun!
- UTL 59 - Needox patches - upgrades 3.0.1 to 3.02 and 3.02 to 3.03.
- UTL 60 - K-Label 1.3, Jan-Dot 1.7, Flowchart Camper, Boot, Show Time 2.0, Multisync.
- UTL 61 - Renome II, Zax Archiver 2.1, Insert Date, Morrow, Shadow Ramdisk.
- UTL 62 - BJ Chrome 1.1, Disk Master, Grocery Listr, Skilable Mouse, Auto Load, Blitz.
- UTL 63 - JC Calendar 0.3 - an extremely polished and flexible calendar maker.

BUSINESS (ANY RES)

- BUSI 1 - Invoice And Statement Generator demo, Sales Controller - High Res only.
 BUSI 2 - Sheet 2.0, Base One, First Base 1.6, Home Budget Template.
 BUSI 3 - Fastbase 2.0 - demo, fully functioning but with limits.
 BUSI 4 - Opus 2.2 - brilliant spreadsheet. 1 Meg+.
 BUSI 5 - WG Data, ST Sheet, Visi Clone - three more spreadsheets.
 BUSI 6 - Double Sentry Book Keeping System, Address Book.
 BUSI 7 - Astubank 1.1 at - complete home accounts system - colour only.
 BUSI 8 - G-base - a graphical database designed for importing graphics. Colour only.

MUSIC & MIDI

- MUS1C1 - Samplericks 1.5 - a popular soundsource creator with samples & source.
- MUS1C2 - Noisebrick disk 1, works with most soundtracker creators.
- MUS1C7 - Hacker voice disks and songs for use with Quikset.
- MUS1C9 - MIDI Magnet, Chord Master, Keys KWP, DXB 1.2, Satellite (High Res only).
- MUS111 - Arpeggiator, Zeppelini, MIDI Beat, Project, Jubilee, MWS-50 - any res.
- MUS112 - Henry Cho Sequencer, Composer - any resolution.
- MUS113 - Drum Patterns for Cu-Base in standard MIDI format - any resolution.
- MUS114 - Yamaha PSY970 Editor, includes loads of sample voices.
- MUS122 - Alchemie Junior 2.2 - sequencer with real-time, multitracking etc. High res.
- MUS123 - Sound Merlin - good non-commercial program, Motorola Digi-Waltz - compose music without musical knowledge, High res only.
- MUS124 - Music Composer - STE only, Proton, MWS-50, any res.
- MUS125 - DR-17 Omega II demo of their amazing new sequencer 1 Mega.
- MUS126 - PSS Utilities disk, loads of programs including patch editor, litarion etc.
- MUS127 - Gatoz C2 sequencer, 32-track sequencer, Kawai K1 editor, MIDI menu.
- MUS128 - Editor and Librarian for Yamaha TX16, TX16D, Swiatcher, High res only.
- MUS129 - Kawai K1 synth sounds.

WORDPROCESSING (ANY RES)

- WORD 1 - ST Writer Elite, EDI Text, Zap ST, ST Page, Typist, Desk Accessories.
WORD 2 - Mail Merges, Spell Checker, Large Printer Model, Count, Double, Convert.
WORD 3 - Font Master Deluxe (High Res) - a kind of DTP program in German.
WORD 4 - First Word + tools, Grammar checker demo, Spell Binder, Text Filter.
WORD 5 - Calamus Demo, no save function but you can print. High Res only.
WORD 6 - Redactor 3 demo - contains everything except for the save function.
WORD 8 - DB Writer 1.4 - slick document processor with spell checker & mail merge built in plus all the usual functions. High Res only.

EDUCATION

- EDUC 1 Kid Mids, Kid Notes, Kid Piano, Kid Puzzle, Kid Graph, Rebus, Kid
EDUC 2 Kid Grid, Kid Mixup, Kid Publisher, Kid Sketch, Kid Story, Kid ABC
EDUC 6 *Mom's Made Easy*, Kid Shapes, Kid Shapes Plus, *Roca Cars*
EDUC 7 *Maths Made Adventure* - colourful graphics, easy to play, Age 6+
EDUC 9 *Bodyshop*, *Computer School 2* & 3, *Butterfly in the Park*
EDUC 12 *English Conjugation System*, *Pure Logic*, *Phonics*, *Kid Capers*.
EDUC 16 *Frangilis* 1 & 2, *French Terms*, *Me first* 20, *Numbers*, *Slimming*,
Spanish *Verbo Tutor*, *World at Risk*, *About the House*, *Pure Match*.
EDUC 19 *Computer School 4* - tests reflexes, memory, logic, coordination etc.
Easter Egg Hunt - pleasant adventure for 7-12 yrs without violence etc.
EDUC 21 G.C.S.E. Higher Maths Grade Tutor, *Frangilis* 3 - French Tutor
EDUC 22 G.C.S.E. Chemistry Tutor - all you need to attain grade 'C' or above.

C.I.A. WORLD FACTBOOK

Four disks crammed with information about the world, covering 247 notions and their populations. An absolute mainstay of knowledge useful for research. Also covers weights and measures and contains a complete Chemistry Reference Book. Amazing!! EDUC 23-26.

£5.00

- EDUC 27 • Mastertime • brilliant time tutor, covers analogue and digital + Human.
EDUC 31 • 1900's USSR - o very good interactive learning system.

SHOESTRING EDUCATION

- SHOE 1 - Robot Attack - tests children on their times tables. £2.95.
SHOE 2 - Moon Letters - a nice spelling type game. £2.95.
SHOE 3 - Picture Mix - Age 6+ the aim is to recreate a mixed-up picture. £2.95.
SHOE 4 - Robot Words - a friendly hangman type game for kids. £2.95.
SHOE 5 - Alphabet Mix - like SHOE 3 but with words instead. £2.95.
SHOE 6 - All Blocked Up - A really good maths/shoot em up game. £2.95.
SHOE 7 - Word Race - win races by spelling words correctly. £2.95.
SHOE 9 - Maths Fun 1 - a nice maths game for children. £2.95.
SHOE 10 - Mini Boggle - a good version of the classic game of boggle. £2.95.

PROGRAMMING

- LANG 1/2 - Sozoban C Compiler release 2. Includes documentation, shell etc. £3.
LANG 3 - C Source code, loads of routines including documentation.

GNU C++ COMPILER 2.1

This five disk set is archived and will need to be unarchived to a hard drive before use. It also requires at least 2.5 meg of memory. This is intended as a developers version - ie not for novices. LANG 5-9.

£6.50

- | | |
|---------|---|
| LANG 11 | • GFA Basic programs, includes runner program. ST Basic 1 programs. |
| LANG 13 | • Professional GEM guide - 17 chapters of tutorial with C source. |
| LANG 16 | • STOS Tutorial and various Basic programs. |

- LAV 24 * *CAdventure Toolkit* - the very best adventure creator available.
- LAV 25 * *GFA Basic v.2.0* - GFA Expert - a nice GFA Basic toolkit.
- LAV 29 * *STOS Tracker* - adds a new set of STOS commands for Soundtracker.
- LAV 30 * *Conanado Enterprises* *cdt v2.0* - 12 chapters + more!
- LAV 31 * *Fascal Compiler*, includes linker, library files, shell + programs.
- LAV 35 * *Ultimate GFA Database 1.7* - loads of references to GFA articles.
- LAV 36 * *STOS Extras*: Missing Link, Misty, Biter, MIDI, SPS + 7 more!
- LAV 37 * *STOS Software pack* - 1 - millions (almost) of routines etc.
- LAV 38 * *Robert Arntsen Source Code disk* - from the author of Shockwave.
- LAV 39 * *The complete STOS disk* - code to Pandora's Box.
- STOS 9 * *The lost issue of STOSSER disk* - magazines, tutorials, articles, reviews.
- BURJO 2 * *68000 Programmers Library* - hundreds of routines for games. £2.95.
- BURJO 4 * *Mastering Bits* - 1 more routine for screen effects, music, scrolls. £2.95.
- BURJO 16 * *5-68K Reference* - 3 includes full code on ST internals, excellent. £2.95.

BEGINNERS GUIDE TO STOS BASIC

This is a complete programming course for all ST/STE's consisting of a 618 page, ring bound course manual plus two double sided disks with over 190 programming examples. 26 chapters will take you through step-by-step how to create shoot em up's, art programs, junior educational programs, GCSE maths programs, databases, word processors, music programs, and much, much more. Recommended retail price is £39.95 plus postage but we are doing it for an amazing £29.95 plus postage (£3.00 UK only). Read the box below for details of our unmissable EXCLUSIVE software mega-pack!

£29.95

STOS PD SOFTWARE MEGA-PACK!

This is a collection of seven double sided disks selected from our library especially for their value to STOS programmers. We are offering this pack EXCLUSIVELY to customers of the Beginners Guide to STOS Basic (see above) at the amazing price of just \$2.95! This pack consists of LANG 29, 36 & 37, GAME 19 & STOS 7, 8 & 9 which contain an upgrade to the latest version of STOS, tons of STOS extensions, mountains of source code including several complete games and the three latest issues of STOSSER magazine which are crammed to the brim with articles, hints & tips, tutorials, routines and many freebies. NOT TO BE MISSED!!

£6.95

**This pack ONLY available to
customers of the Beginners Guide
to STOS Basic**

POSTAGE RATES:

UK: FREE
EUROPE: 15p PER DISK
REST OF WORLD: 50p PER DISK

**FREE ST CATALOGUE
WITH
FREE SOFTWARE
FOR NEW CUSTOMERS
UPON REQUEST**

PLEASE RUSH ME THE FOLLOWING DISKS:

DISK CODE	PRICE (£)
SUB-TOTAL 1 (£)	

- | | |
|-------------------------------------|--------------------------|
| ST CATALOGUE | <input type="checkbox"/> |
| FALCON CATALOGUE | <input type="checkbox"/> |
| TEMPTATION 1 STFm (£12.50) | <input type="checkbox"/> |
| TEMPTATION 1 STE (£12.50) | <input type="checkbox"/> |
| C.I.A. WORLD FACTBOOK (£5.00) | <input type="checkbox"/> |
| GNU C++ COMPILER (£6.50) | <input type="checkbox"/> |
| FOOTBALL TACTICIAN 2 (£22.95) | <input type="checkbox"/> |
| STOS BASIC GUIDE (29.95) | <input type="checkbox"/> |
| STOS MEGA-PACK (£6.95) | <input type="checkbox"/> |

- | | |
|-----------------|--|
| SUB-TOTAL 2 (£) | |
| POSTAGE | |
| TOTAL | |

Name

Address

Postcode.....

Telephone

SEND YOUR ORDER TO: NEW AGE PDL (DEPT STU15), P.O. BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD

Mail order is at its best reliable, fast, and cheaper than the shops, but at its worst has slow delivery times, low quality equipment and a faulty "but it was fine when it left our premises, sir..." product posted to your front doorstep.

Some people swear by postal purchase while others, with their fingers and wallets well and truly burned, advise caution, painting grim horror stories of scandal and swindle as their hard-earned cash disappeared into a large financial abyss – their biggest achievement being an appearance on *Watchdog* as another abused and much misused customer.

Like any kind of business transaction, whether it be buying a house or sending off for a piece of software, the first rule is knowing your rights – essential if you want to have the best chance of not being ripped off.

Due to the recession, many small companies have bitten the bullet and sunk without a trace leaving, in some cases, bitter customers wondering where their money went.

You may think that once a business has folded, that's it, it's tough luck and you might as well forget any cash refund. Well not necessarily; if you have paid a deposit or even an advance payment, you automatically become a creditor.

PECKING ORDER

This allows you to be on the receiving end for some kind of pay back, but there is always a rub – a strict pecking order with the banks, financial institutes and everyone's friend, the Inland Revenue office being first in line for any cash hand-outs.

You, on the other hand, the humble and most important part of any business (the customer), are left last in line with a begging bowl, hoping to catch a few crumbs as the financial vultures rip off mounds of flesh from the corpse of the dead company.

Under the Insolvency Act of 1986, you are allowed by law to know exactly what has happened to the deceased business, so put your case in writing and contact the liquidator or receiver.

From there, several things can happen – if you have returned the goods for repair and they're still under warranty, it's well worth considering a visit to the premises and having a chat with the administrator or liquidator in person with the intention of laying your hands on your property. If

When mail order companies take your money and don't provide you with the product you wanted, what can you do? Adam Phillips investigates

possible, take along evidence of purchase such as cheque stubs or more ideally receipts, while making sure that you have proof of identity to verify who you say you are.

Alternatively, you may have ordered and paid for the product and it's sitting in

Don't get

the offices with your name and address on it. If so, there's a good case for claiming it.

If you paid by credit card for a price over £100, then it's possible to claim refund from the credit card company under the Consumer Credit Act. Though this is not a popular option in

the eyes of credit card companies, it's well within your legal rights.

If you placed the order through a magazine or newspaper and it displays either the Periodical Publisher's Association symbol (covering mags) or the Mail Order Protection Scheme, then you are covered for a claim.

Make sure that you do this within three months of the particular company's last advert appearing or this protection is rendered invalid.

Another quailm that can be a problem for customers is delayed merchandising. While in the strictest sense, companies should not take any money or cash any cheques until the order is fulfilled, it's not illegal so you have to approach the prob-

lem in a different way.

One of the first rules of home delivery is if you think you may be out when a parcel may be delivered, remember to give an alternative address such as a neighbour's or another time to drop by.

If you need your package sent as soon as possible, a useful piece of legal talk is to write to the company's head office to inform them that you need to take delivery by a certain date as "time is of the essence".

Set a reasonable time for delivery such as a week to ten days and if this expires, you become entitled to a refund because the mail order firm is in breach of its contract.

On top of this, you may also be entitled to claim reasonable compensation brought about by the delay especially if it ended in yourself buying the product from somewhere else in the meantime.

The final and most frustrating problem is when the parcel arrives at your house

CONTACTS

Advertising Standards Authority
Brook House
2-16 Torrington Place
London WC1E 7HN



Mail Order Protection Scheme
16 Took Court
London EC4A 1LB



Periodical Publishers Association
Imperial House
15-19 Kingsway
London WC2B 6UN

Mailing Preference Service
Freeport 22
London W1E 7EZ



bitten

and on opening it up enthusiastically, you realise to your horror that the wretched thing is faulty.

If the goods were damaged in transit then it's not the supplier's responsibility and therefore the matter must be taken up with the carrier or Post Office (pop in to your local PO and get a claim form if this should happen).

If, on the other hand, the goods are defective, you have the same rights under the Sale of Goods Act as if you'd bought the item directly

over the counter. Contact the supplier as soon as possible – by law you are entitled to a full refund.

Phone and put your complaint in writing and send the product by recorded delivery so that the firm cannot deny anything at a later stage, and arrange for the return of the goods. Also make sure to ask for the return carriage charges to be reimbursed as well.

Finally, make sure that the product you receive fits the description given to you in the advert, that it is of merchantable quality and that it's fit for its purpose. Happy shopping.

The 12 Commandments

While the majority of mail order companies conduct their business in a responsible and professional way, what is important to remember is that for someone to set up a company, place an advert in a paper or magazine and sell anything requires no mandatory registration or vetting by a governing body whatsoever.

For that reason, it's always wise to follow the basic rules for safe postal shopping:

1. When first clapping eyes on something you must have, check that the magazine/catalogue is up to date – it has been known for cheques to be sent off recently for offers that were made in 1989 – no joke.
2. Read the advertisement closely. Look for the small print so if anything does go wrong, you're fully aware of what the advert stated – delivery times, guarantees and so on. The publication you are ordering from is covered by the British Code of Advertising. The BCAP states that ads should give a delivery time and that it should be no more than 28 days.
3. Look out for extra costs – postage and packaging can sometimes add a few pounds onto the overall price. Some companies include this in the advertised price, while others seem to forget until the bill arrives.
4. Check availability with a simple phone call. Sometimes the item you want may be out of stock so there may be a delay. Note down what they say.
5. Enquire about rules and costs before you place the order.
6. When you write off for the goods, remember to include your name, telephone number and address and make sure it's legible. Your number is important for any subsequent delivery problems that may occur.
7. If you wish to avoid mailshots landing on your doormat every month, tell the company that you don't want them to pass on your name address to any third parties. For extra security against junk mail, write to the Mailing Preference Service. Any company wishing to send direct mail should check the MPS register and exclude the people who have placed themselves on it.
8. Keep copies of the order with the date on it as well as any subsequent correspondence that may occur with the company. Make photocopies – computer files on disk are frowned upon by modern courts.
9. Make notes of any phone conversations you have with the mail order firm and the names of the people you speak to – this kind of information can be very useful as a legal weapon for evidence.
10. Never send money through the post – the Post Office advises strongly against it and will not refund you in anyway if it is stolen or "misplaced".
11. Only send in the cash in the form of cheque or postal order when absolutely required to. Keep records of any financial transactions you make.
12. Contact the Advertising Standards Authority if all demands are ignored and if push comes to shove, consider legal action in a court of law.



WARZONE PDL

MORE THAN JUST A PD LIBRARY

53 Ropewalk, River St., St. Judes, Bristol BS2 9EG
Telephone/Fax: 0272 553758

BUSINESS

- BUS-02** ST Writer Elite (Good Word Pro)
This is still one of the very best WP's around written and released into the Public Domain by ATARI themselves. This version 4 is a must!
- BUS-03** EZ Texts (Working DTP demo)
Working demo of excellent DTP program (Full Version Available) see ad for ZZ Suit
- BUS-06** Qpus (Professional Spreadsheet)
Best Sheet available without a mortgage!
- BUS-11** Desktop Drivers (fontdrivers)
If you've got a Desktop Printer and are in need of drivers, specific or general then this is the disk you're looking for
- BUS-12** Fastbase (Excellent First Database)
- BUS-16** Calamus Fonts (28 extra fonts)
- BUS-17** Printing Press (Cards, Disk labels, Posters, Banners, Mailing Labels and much more)
- BUS-19** P Press Support (Extra graphics)
Make the most of your more p/m printer with the help of BUS-17 and 19, print Greetings & Business cards, Flyers, Posters, all types of labels and much, much more
- BUS-21** Add. book/Calc/STDBase + 5 others
- BUS-26** Drgman/Sheet/Word pro 4.7 others
- BUS-27** ALICE (Excellent Text Editor)
- BUS-28** Publishing Partner Fonts (8 + editors)
- BUS-29** EZ-Label/Cardfile/Mailmerge + 8 more
Three excellent main programs: Labeler, Card File & a Mail Merge prog. + Calendar Mouse Acceleration, Disk Labeler and 5 other indispensable utilities

zz Soft

Quality, Professional Software
at a Budget Price

Easy Text Prof. Vector

Now with text at any point size and text can be rotated at any angle. Requirements: Speedo GDOS, Double sided drive, Hard Drive, 2 Meg RAM

RRP £39.95 OUR PRICE **£37.95**

IMPRINT

View, Convert & Process images. Print to most 9 pin or 24 pin, Mono or Colour printers. Comes complete with picture grabbing utility!

RRP £15.99 OUR PRICE **£14.99**

E-Z TEXT +

The perfect introduction to Desktop Publishing. A good starting point for beginners, giving professional results. Requires Mono for 300 D.P.I.

RRP £19.99 OUR PRICE **£18.99**

Introducing

ATARI ST Machine Code

Learn to program in Assembler. This excellent package, comprising of a well written and very extensive book & disk combined with source code from the book and other utilities, is suitable for a beginner, novice or intermediate programmer

RRP £19.99 OUR PRICE **£18.99**

☆ E-Z TEXT PROFESSIONAL ☆

A full features, high quality, award winning - (ST USER'S Blue Chip Award), DTP program. Compatible with 99% of printers inc. Laser and Inkjet. Uses GDOS & standard GDOS fonts. Requires a minimum of 1 Mbyte of memory

RRP £39.99 OUR PRICE **£36.99**

fully inclusive of post and packing

STE ONLY

- STE-05** Mental Hangover, Amiga Conv, 1 meg
This is another one of those Amiga demos converted over to the ST and it does the job so much better!!
- STE-06** STE Presentations (5 demo's)
- STE-07** Fantasia (not Tos 1.62/1 meg) + 3 more
- STE-08** Being STE + Mini-Movie
- STE-09** Stone Balls + An Cool Demos
- STE-10** The Taboo Richter Art Show
This famous AMIGA artist comes to your ST with a fabulous STEREO soundtrack (mono on STMs) (2 DISK SET £2.75)

FREE

10 capacity clear Library Case
with order of 10 normal price PD disks
OR
only **£1** with any order

GENERAL

- GEN-02** ST Tour (Specially for beginners)
- GEN-04** Your 2nd ST Manual (A MUST)
All the little things (and some not so little) that our friends at ATARI should have told you but didn't. This is the manual that should have been supplied with your computer (at least in our humble opinion).
- GEN-05** Adventure Writer/Skymap + 4 more
- GEN-06** Archive Suite (back-up in less space)
- GEN-09** ZX-81 Emulator + lots of programs
Back to those halcyon days of the ZX-81 Emulate (if you must) this forgotten unit Formfinder 2.1 (find a winner?)
If you like a flutter on the horses then maybe this program can help to make it profitable! This is a Working Demo. Full version available
- GEN-12** 60 assorted samples (SPL Format)
Firstbase DB+7 more good programs
- GEN-16** E Plan (Electronic Circuit Designer)
- GEN-20** Joke Database (Laugh with us!)
- GEN-22** Quartet Samples II (730k of samples)
- GEN-24** Film File Enquiry
With this unusual Database you can keep track of all your favourite Films, Actors, Directors etc. Lots of classic films inc
- GEN-31** Data File (TV Tiller/Asst. Chef/Party)
Great value on this one: A Video Tiller and extensive Recipe/Instruction Database + a bevy of alchemical cocktails!!
- GEN-34** Sozobob 'C' (language)
- GEN-35** Spectrum Emulator (with programs)
Introduce your ST to that long, long ago entity, the ZX SPECTRUM complete with working progs

INKJET SUPPLIES

A full range of supplies including all major brands of refills, paper etc always available. Please call for further information

DEMOS

- DEM-102** Doctor Who Demo
- DEM-88** Light Speed Demo
- DEM-90** Delicious Demo (2 DISK SET £2.75)
- DEM-95** Wings of Death Music Demo
- DEM-97** KLF Demo (House hit + dancers)
- DEM-98** Star Wars Rap
- DEM-101** Spinning Dols + Shiny Bubbles
This one takes a while to load but the end result is more than worth the wait
- DEM-84** Things Not to Do (EXCELLENT)
Very Humorous, animated account of things not to do and the result if you did
- DEM-67** Fish & Chips (GET THIS DNE)
Loads of excellent demos, with some very funny interludes between them
- DEM-46** European Demos (2 DISK SET £2.75)
- DEM-44** Skid Row (2 DISK SET £2.75)
- DEM-43** Punish Your Machine! 2 DISK SET £2.75
Countless demos on all of the above two disk sets. Can any DNE user really handle all these amazing demos and stay sane?
- DEM-75** Dark Side of the Spoon
- DEM-82** Wasted Years
- DEM-70** Lifes a Bitch
- DEM-54** Gateway to Helland
- DEM-48** Summoning the Spawn
- DEM-100** The Run (animation from T. Richter)
This one is so much better than the original AMIGA version
- DEM-55** Art Machine
Sit back and enjoy this stunning artwork

ART & GRAPHICS

- GRA-26** Crackart
No 1 in STR's PD Top Ten! This prog will process your pics in ways you will not believe: Curve, Twist, Wave, Tube, Palene edit, Dither, Animation and far more. Uses Degas, Neo & Tny format
- GRA-24** Paintlux (full feature paint/art prog)
- GRA-20** Kozmic (needs 1 Meg)
Create fantastic, colourful psychedelic patterns on your ST & save to disk
- GRA-17** PAD (Mono Art program)
Absolutely the best Mono art package we've seen to date, many commercial features and the ability to hold many screens in memory (1 Meg min)
- GRA-27** Mono Pictures (43 high res pics)
- GRA-10** Colourburst II (+ 5 other programs)
A very good little Art/Paint prog also on the disk: MAC to Degas converter Fine Line: art prog using Bezier/Spline
- GRA-11** A.I.M. (Atari Image Converter)
Exactly what it says, if you can create an image on your Atari then you can process, add or alter it with A.I.M.
- GRA-14** Ani-ST
Excellent Art & Animation package that started life as a commercial art program costing £89.95!
- GRA-31** Kid Publisher & Master Doodle
A DTP package with Art/Paint program both good starting points for the kids
- GRA-32** Colourspace
This is another program that started life as a commercial package now released as Shareware by Jeff Winter. Create your own colour & light show. Turn up the music, sit back and be amazed
- GRA-33** Sprite Works
Art Prog geared towards creation of Sprites for use in your own programs
- GRA-28** Hi-res Art
4 programs & pictures for Mono users
- GRA-1** Pieswich 7.0 (needs 1 Meg!)
Converts your pics between various formats and all screen resolutions
- GRA-2** Play - IT
Combine picture and sound into a story board with special scripting commands



C-FONT

Converts Calamus fonts into Bitmap fonts for use with any GDOS package

OUR PRICE **£8.99**



TOS 2.06 Upgrade

This software switchable board comes complete with TOS 2.06 rams to enable you to switch between your original TOS and the much improved 2.6 version. Comes complete with Icon Editor and utilities.

OUR PRICE **£62.95**

TRACKERS & MODULES

- TRAX-27** Empire Noise Tracker 1.5
+ 3 modules & utilities
- TRAX-44** Digi-Composer (STE Tracker)
with 4 modules
- TRAX-47** Mega Tracker (4 trackers)
- TRAX-48** Suit ST or STE + 6 modules
- TRAX-48** STDS Tracker (for STOS users)
- TRAX-37** MUG AMIG 3
5 outstanding Amiga converted mods
- TRAX-43** Rave Dr (10 mods in Rave style)

JANUARY SALE

Due to the success of January sale i.e. all disks £1.25 each, this offer has now been extended until 28th February
To qualify, all orders must be received by February 28.

MIDI

- MIDI-20** SYS EX Kit (2 DISK SET £2.75)
System Exclusive Kit... if your keyboard supports (YAMAHA) Sys-Ex then this set is for you: two disks chock full of MIDI & SYSTEM EXCLUSIVE prgs, utilities, accessories & tips
- MIDI-19** Akhenise Jar (good sequencer)
- MIDI-17** Recording Studio Utilities
Keep track of your tracks with these exceptionally good Studio Utilities
- MIDI-12** Henry Cosh Sequencer
- MIDI-14** Name That Tune (111 midi files)
- MIDI-01** PSS special (just for PSS boards)
If you own of YAMAHA's PSS series keyboards YOU NEED THIS DISK.....
- MIDI-03** Create an album from 43 SNG files
- MIDI-04** 42 SNG files with CZ101 player
- MIDI-05 to 08** Each disk has 40 SNG files
- MIDI-10** CZ & DX editors & librarians
- MIDI-11** Picture show with 10 midi songs
- MIDI-14** Name That Tune + 111 midi files
- MIDI-16** Sound Shifter... Yamaha PSS editor
- MIDI-18** DX & FB101 editor & librarians
- MIDI-21** Feeling Partner & EZ Track demo's
Working Demos of these two great commercial MIDI packages
- MIDI-22** Super Conductor sequencer + utils
- MIDI-09** 32 Track Sequencer + utils

AUTHORS

of PD., Shareware & Licenceware
Here at Warzone PDL we're always looking for new and innovative titles for inclusion in our library, if you have written something you feel is of good standard then please call us, we'll be happy to hear from you

COMMS

- COM-02** Gadsisn Comm... On-line game.
You'll need two STs & null modem cable
- COM-03** Vanieria 4.0 (best PD comms prog)
Still the best PD TELRM program!
- COM-04** Uterm (Excellent terminal prog)
- COM-07** Freeze Dried Terminal
- COM-08** View DIL files when off-line + 4
- COM-05** D-Term with Z-modem module
- COM-06** Mo-Term Elite (for buffers)



WE NOW OFFER

CREDIT CARD FACILITIES



THIS MONTH'S SPECIAL OFFERS

Quality Mouse House/Pen-Pencil Holder£1.99

Mouse Mat & Mouse Holder£2.99

these items are inclusive of postage & packaging

GAMES

- GAM-79 VIOLENCE (kill shoot-em up)
No. 4 in December's STR PD Game TOP 10
- GAM-98 Bubbles McGeo/Viking + 5 more
- GAM-07 Clowns & Missile (8-bit clones)
- GAM-22 AstroDodge/Subhumb + 10 more
- GAM-28 Question of Sawdust/Frogger + 1
- GAM-34 X-wind/Bugs/Warrior + 2 more
- GAM-36 Klostir/Entombed/Mr Dice + 2
- GAM-38 Caves of Rigel/Froggy/Harris
- GAM-45 The Alien Blob (very addictive)
- GAM-51 Battleships (with speech) + 2 more
- GAM-59 Dungeons/Gravity/Maze + 3 more
- GAM-60 Armour/Hunted/Quizcal + 3
- GAM-62 Bermuda Races/Geowiz + 2 more
- GAM-67 Battle for the Throne/Video Vegas
- GAM-68 to 70 Adventure Solutions... Solutions to well over 100 adventures on 3 disks for £3.00
- GAM-73 Lazerches/Time Bandit + 7 more
- GAM-76 Chess Nut + over 90 game cheats
- GAM-76 Midmaze 2 + 2 more
- GAM-83 S.T.C. Adventure Winter Demo
- GAM-84 Tetris/Drachen + 4 (AMONO games)
- GAM-85 Mutant Camel/Llanorath (1 meg)
- GAM-88 Odeus & Sir Ramie Hobbs (adv)
- GAM-93 Mars Maze
- GAM-95 Lazerball/Lazer Racer + 3 more
- GAM-23 Go-Up/Novat/Target
- GAM-30 Mix & Match + Plumb Crazy

GO FOR GOLD!!!

Join WARPCZONE GOLD CLUB now! and get FREE s/ware each quarter + 20% off D/S disks, 10% off S/S disks, 10% off RRP of commercial software/hardware. Free Disk & other gifts on joining.

All this for only **£10.00** per annum

- GAM-101 Druid, Insecto & Miss Munchie
All arcade clones
- GAM-102 Fokker, Megapack & Match-up
3 commercial quality games
- GAM-95 Bomb Jack, Mad Mole, Lazer Racer + 2
- GAM-84 MONO 3
- Tennis, Poker, Push, DRACHEN, Cipher & Daisies all for Mono Monitors

SUNDRIES

SCOOP BULK PURCHASE

High quality lifetime guarantee
DS/DD Blank Disks
100 - £ 30.00
250 - £ 72.50
500 - £135.00

Post and Packaging on all disk purchases:
£4.50 parcel post, £8.50 courier

DISK STORAGE BOXES

50 Capacity £5.99

100 Capacity £7.99

PRINTING PRESS

Print Labels, Cards, Flyers etc.
PRINTING PRESS SUPPORT
Extra artwork, icons & borders

Both Programs only **£2.50**

CLIP ART

- CLIP-1 Clip Art Vol. 1
Cartoons, Cars, Animals, Astrology, Computer, Disney, Flags + much more
- CLIP-6 Clip Art Vol. 6
Borders, Frames, Tiles & decorations
- CLIP-7 Clip Art Vol. 7 (Viz & Garfield)
- CLIP-8 Clip Art Vol. 8
Genetics Guide to Sex, very funny extract from book in clip art format
- CLIP-2 Clip Art Vol. 2 (Scrolls & Banners)

FREE OFFER

Placing a software order for more than £9.00 will entitle you to a choice of one or more of the disks in the box on the far right FREE!

If you have
Imagination
Computer & Printer
POW!
you have
your OWN T-SHIRT
ATARI

NOW EVERYONE CAN WEAR THEIR IDEAS
Design - Print - Iron - Wear

Print 'n' Wear

Textile Transfer Papers

Design your masterpiece, using any art package on any computer then print out your design with any...

For Dot Matrix Printers either in Mono or Colour and iron on to any fabric!!! all this left to do is to wear your very own creation!

Now only **£7.99** per pack

MIXED BAG

- MXB-20 Floppy 3/Disks + 10 others
inc. File Packer, File Reader, Qwikmouse, Desktop Music, 2 Demos, Battlezone Game, Nasa Game, Desktop Cala & more
- MXB-14 Geography/Typewriter + 10 more
- MXB-12 Grammar check/Lean calc + 10
- MXB-10 Diskmoch/ST Init + 11 others
- MXB-21 Quark... 30 Set Fi stories on disk
- MXB-18 Professional Astrology

A truly professional Astrology prog with serious support and upgrade - add on modules, available from its very helpful author

- MXB-16 15 asd'd utils inc. Goodies/Fontrix
- MXB-04 12 asd'd utils inc. Codefind/Arc

inc. Archive prog. Assembler to GFA STD code finder, Format prog. HD Utility, Data Salvage & more

- MXB-25 Miscellaneous
- STOS upgrade (to any ST), Dual Column printer, Fastprint utility, Spell Checker & Artpaint - a way to keep graphic track of your piece's and Clip Art

UTILITIES

- UTIL-40 Mindraft 2 (+ST CAD + 1 more)
- UTIL-24 Mega Utility (31 asd'd utilities)
- UTIL-06 HD utility/Ramdisk and 12 others
- UTIL-20 Archive Suite (compression progs)
- UTIL-21 Slicker III (best disk labeler)
- UTIL-22 10 progs for printer owners
- UTIL-05 7 suites of various label progs
- UTIL-30 Address book/Vol/Packer + 12

UTILITIES

- UTIL-32 MINT (mini type system)
- UTIL-33 Superboot 7.2 + 7 others
- UTIL-04 Disk catalogue & Labeler + 1 more
- UTIL-06 Formater/Ramdisk + 12 more
- UTIL-10 Gemini, alternative, Desktop
- UTIL-11 18 asd'd desk accessories
- UTIL-16 17 asd'd desk accessories
- UTIL-24 Disk Doubler/Dual Format + 12
- UTIL-27 Sigroton (Virus killer, very good)
- UTIL-38 Vault (best HD back-up) + 5 more
- UTIL-02 System 2 (replacement op. sys)
- UTIL-39 Various Archivers & Packers
- UTIL-40 ST CAD II (excellent CAD prog)
- UTIL-41 Spreadsheet/Sector split + 4 more

PRICES

£1.50 per D/S disk
Intro disk catalogue
including 700k software **£1.00** +
S.S.A.E.

All orders over **£5.00** add 50p
p&p unless otherwise stated
(U.K. only). All overseas orders
in Sterling. Overseas postage
rates on request.

Catalogue Only:-
Please send Blank Disk & S.A.E.

Only one Free Offer per order please.
Cheques/P.O.'s to Warpzone PDL

MUSIC

- MUS-31 Megarave (extra long Rave track)
- MUS-29 Energy for You (5 Dance tracks)
- MUS-28 Hardcore Dancefloor (NOT STE)
- MUS-21 Hi-Fidelity Dreams
- As reviewed in March STR, you have just got to hear this! Better on an 'E' Amiga cat your heart out!!!
- MUS-22 to 27 Peaks & Poles 1 to 6
All these tracks are of the same quality as Hi-Fidelity Dreams (MUS-21)
- MUS-30 Musical Wonder Dream
88 pieces of music some original some Digital tracks & some Sound Chip tunes

P.D. STARTER PACK

10 Double Sided Disks of Your
Choice in a clear plastic library case. An
offer that is definitely not to be missed!

£11.99

Fully inclusive of post & packing

★ excludes all free offers ★

EDUCATION

- EDU-4 Body Shop, Kid publisher/Story
- EDU-5 Spelling Easy + Alphabet
- EDU-21 Master Time (Analogue & Digital)
- EDU-24 Playtime (6 activities for very young)
- EDU-20 Stargazer (astronomy - 2 programs)
- EDU-19 Rip It Up (learn Highway Code Demo)
- We also carry the full range of
SHOESTRING Educational Software



MEGA Pack

21 packed to capacity d/d disks
over 14.5Mb of software.
A cross section of our library - all
this for only **£22.99** inc p&p.



DEMO Pack

A feast for your eyes and ears with
over 60 Demos, many doing just what
the ATARI is not supposed to be able to do!!! **£8.99**



SOUND Pack

Made just for the pure pleasure of it. That's what this
pack is all about, you will be surprised how good
your ST sounds. 40 tracks to feed your ears. **£8.99**

EXTRA VALUE PACKS

The equivalent of 7 Double Sided Disks
full of programs
now only **£7.99** per pack

MIDI Pack

If MIDI is your thing, then this pack is for you...
Over 60 files inc. Sequencers, MIDI Utilities, MIDI
format seq files, Libraries, Patch editors & more.



GAMES Pack

47 widely varied games, from the really
easy to the frustratingly hard, you're sure to find
something to test your mettle in this collection.

EDUCATION Pack

From pre-school (shape/color recognition) right
through to late teens (Highway Code) you will find
the learning aids in this collection many and varied.

MUSIC Pack

This pack will have you and your ST making music
in no time. Sequencers, Noise Trackers and Modules
Musical Trivia + songs just for listening to.



ART Pack

If you have always wanted to create a masterpiece
and all that was lacking was the tools then look no
further... Art progs and pics along in this pack!!!!

ADVENTURE Pack

Lose yourself in the realm of myth, magic
and mystery with the many and varied text &
graphic adventures in this pack.



BUSINESS Pack

Need a Spreadsheet? or a Database? or
maybe a Word Processor? In this pack
you will find all three and much more.



UTILITY Pack

Here are no less than 50 utilities for
countless weird and wonderful uses. Best
used with your ATARI ST/E.

CLIP ART Pack

This Pack is so new that the files are
not even in the main library yet!!!!
As usual 7 full D/S disks

TAKE any TWO packs

For Only

£13.99

★ Twinpack offer excludes library cases ★

WATCH THESE PAGES NEXT ISSUE

We know by now you must be getting rather tired of seeing this
same old ad, so watch our next issue for a great new ad with
lots of new disks and Special Offers plus new packages never
before seen in this country.

Also to be announced in the new Ad are the winners of the
Xmas Draw.

More than **£9.00**: choose any 1 disk

More than **£18.00**: choose any 2 disks

More than **£28.00**: choose any 3 disks

More than **£40.00**: take all four disks!

- 1) OPERATION GARFIELD - Excellent new STE game
- 2) MIDI MUSIC MAKER - Play most types of Midi/Music files
- 3) ART TUTOR - Let your ST be your Art Teacher
- 4) EASY PLAYER - Play MOD files by just clicking on them

What a turn around! No sooner had I said "Send me more software", then a large amount materialised on my desk. Thanks for your response and keep sending it in - remember nothing is too strange or different for these pages.

Storm

Produced by: Fugitive Freelancers

Available from: LAPD Disk No L64

Alien Breed, the hugely popular arcade blast on the Amiga, was heralded by many as the definitive unofficial film licence of a particularly successful film that surfaced nearly six years ago in the cinema.

Now, several years on after drifting through deep space, the ST equivalent has been salvaged and created by Fugitive Freelancers. It's time to experience masses of aliens with dripping mucus-covered claws and blood dripping in slithering trails from their deformed mouths - the player's mission being to go aboard a mysterious space hulk and blow the living hell out of anything that moves.

On booting up Storm, the first things to strike you are the aural and visuals which make up an attractive front end with well-used music, titles and the odd voice sample as well. As the mission screen is displayed, feelings of anticipation grow but as the playing screen appears and you move the joystick for the first time, these disappear quickly.

The controls and character movement are both slow and sluggish as you move your marine down various corridors, passages, halls and rooms collecting ammo, med kits, key cards for locked doors and credits to



Run down the claustrophobic corridors blasting anything that dares step in your way...

spend on the onboard computer to get extra weaponry. Aliens come at you thick and fast which may be great for an itchy trigger finger but after a while you can't help but feel that if the enemy had been in fewer numbers and more intelligent, it would have created a far more suspense-ridden atmosphere. Instead the herd of beasties run into your bullets only to be replaced by yet another flock a couple of seconds later.

The graphics themselves are effective, especially the aliens, but the main sprite and other alien form (some kind of dark smudgy thingy) are poorly defined.

Aurally, there are quite a few good spot effects with the shooting guns and the short screaming deaths of aliens. All the while, a rumble of music plays menacingly in the background.

It's hard to really recommend a game that has the potential to be superb but as Storm stands, Alien Breed envious and Aliens fans will get a few reasonable kicks out of this blast fest.

PUBLIC SECTOR

Another roundup of all things PD, shareware and licenceware as reviewed by our resident word maestro, Adam Phillips... who?

Label Printer

Produced by: Brite Spark Software

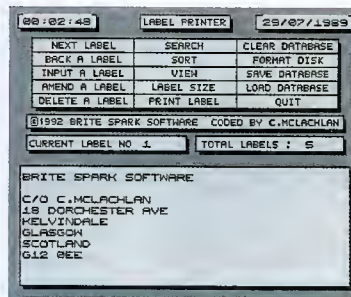
Available from: LAPD

If you ever need a quick and efficient way of printing labels for various uses and have to type them on a typewriter or, unless you're a calligrapher, at worst, have to draw wobbly lettering to go on your home grown wine to give it that special amateur look, then Label Printer could be an end to those frustrations.

Presented in a simple and well laid out series of panels, all the user needs to do is type what they want to appear on the labels and let the computer and printer do the rest.

The program also features a personal database plus file to Brite Spark label printer

converter to help with any compatibility problems. A useful and practical utility.



Labelling for all occasions with this handy utility

Kev's World

Produced by: Beni P.

Available from: Caledonia PDL Disk No GM 196

Kev's World, Kev's World, party time, excellent and other hip and happening phrases which will be regarded as relics by the time next year "schwings" round.

Kevin and his planet is actually a reasonable stab at a platform adventure. Guiding a distinctly nerdy character round the screen is the usual joyous affair - collect stars to amass a bigger score, avoid the assorted creatures and hazardous obstacles such as spikes and water, and pick up the occasional power-ups for invincibility, extra energy and more lives.

At the end of each long level through what appears to be a large castle, you're confronted with an especially nasty creature that is guarding your girlfriend. Defeat it and it's onto the next, more difficult stage.

The titles' main weakness is its speed which is always a little jerky but the actual gameplay is quite fun and challenging. The

platformer market will always be with us and Kev's World joins the universe of commercial and PD jumping about programs confidently.



Excellent, schwing, take a pill, we're not worthy... and so on into catchphrase oblivion

The Glass Buttock of Tharg

Programmed by: Ian Scott

Available from: The Floppyshop Disk No GAM.4167c

Once upon a time, there was a queen who ruled over a peaceful and beautiful island. One day, she had an accident involving a goat, some soft cheese and an electric sander which resulted in her left buttock being sliced off.

All would have been well but a state of public panic arose for every time she tried to park herself on the throne, she promptly slid right back off – very embarrassing when entertaining foreign ambassadors.

Word was sent across the world for someone to help with the dilemma and in answer to everyone's prayers, a witch called Hazel offered her services.

On taking measurements, she began the painstaking task of recreating the perfect prosthetic buttock for her majesty.

After a few months work, Hazel produced her finished result – a bum cheek moulded in the finest glass crystal. Alas, to her horror, it was useless because glass is not the most ideal of materials to use for replacement limbs.

She was laughed from the courts and kicked out of the country but before she went, she bestowed the glass buttock with humungous magical powers...

Years later, after the queen's death, the buttock now rules with an



Choose from a wealth of celebrities and try to get Jeremy Beadle into a body bag...



Race across the island as Mr Bean and inspire men with your incredible social skills and charisma to join your cause

iron fist using its troops, the bum bandits (political correctness isn't the programmer's strong point), to marshal the harsh law of the land.

That was until one day, a group of television, film and rock stars decided they'd had enough and planned the overthrow of the glass buttock of Tharg...

And so begins the scenario of the latest game from the creator of the PD classic Grandad series, Ian Scott. Set on the island of Tharg, the player must move his 12 different characters round the map, visiting castles and recruiting men for the righteous cause.

Simply click on the person you wish to use from the selection screen and the action flicks to a first person view of the island. Then move through the Ishar-esque landscape with the intention of raising a large enough army for the destruction of the enemy's castle.

These 12 characters under your command however are not the usual stuff of heroes – ranging from the likes of Mr Bean, Alan B'stard MP and Kim Basinger to Jimi Hendrix, Jeremy Beadle and that old man, Grandad – all given their own portraits for swift and recognisable identification and all ready to die for the cause.

The game is very much in the vein of the old Mike Singleton classic, the Lords of Midnight on the Spectrum, but with simpler gameplay.

It's all very simple and relatively untaxing but quite addictive. The starstruck heroes are purely superficial and it would have been nice to see more to the title especially when put next to the Grandad series but the Glass Buttock of Tharg is well worth taking a look at for something a little bit different to pass the time of day.

Long live King Buttock!

Financier 2

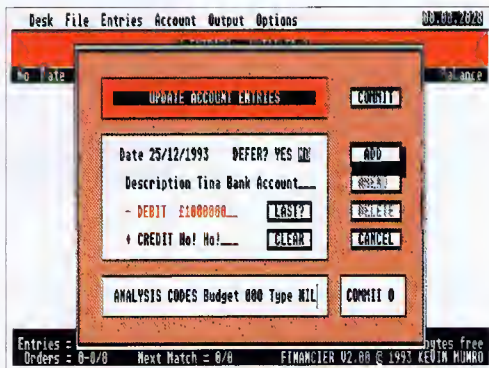
Programmed by: Kevin Munro

Available from: Caledonia PDL Disk No AU-218

This comprehensive utility helps the user to keep track and in control of their finances. While some of us are sticklers for keeping tabs on our accounts, others have enormous difficulty in being motivated enough to keep hold of every little receipt that can then be put into storage with all the others from the last ten years.

Financier 2 is ideal for keeping an eye on your pennies by keeping the records on disk with the ability to store hundreds of different entries. With the fast search and personalised statements options, this can be very helpful for small business use and customers accounts.

Also included is a card file program to organise business cards or addresses for the home. It's possible to import or export files to your spreadsheet or database because the utility has the same data file that your mail merge program has. Financier 2 is well worth taking a look at for a cheap but effective budgeting tool for your ST.



Get organised with Financier mark 2...

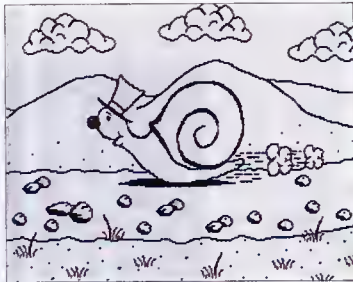
The Never Ending Colouring Book

Programmed by: Tony Gooding

Available from: Merlin PD Disk No MPD1660

Computers are gradually taking over the world. They've steadily replaced most things practical from the typewriter to people's jobs. Now, the colouring book has been made redundant by this rather simple but rather good program from Tenesoft Productions.

No longer are crayons and paints needed for the children to turn the living room into a post-modernist mess worthy of a mention on the *Late Show* – now the ST provides preset pictures with no colour and a painting palette for kids to stick their technological paintbrush and pencil into. By simply clicking on the colour you want and selecting the Fill option, shapes can be coloured and even



Before...



...and after

changed or started from new with the drawing button.

The whole package is very simple to use and comes with ten pre-drawn images from Donald Duck to a racing snail. The only problem is that some children might find creating a solid shape with the pencil utility a little

difficult because above a certain speed, the line breaks up. This makes filling in impossible because it spills out over the rest of the screen.

Other than this, the Never Ending Colouring Book is a user friendly bit of fun and most importantly, unmessy "edutainment" for young sprogs.

Tri-Heli 2

Programmed by: Janet Dean & Cathy Steinbach

Available from: Emerald City Disk No 5G74

Strange games sometimes surface in the public domain which would probably not make it to the screen in these days of large corporations producing more and more mass market formula driven titles.

Less risks are being taken to ensure that sales targets are met and the development budget is justified. This attitude is very similar to the film set up in Hollywood – if it doesn't have tried and tested idea/star/plot then the money men get itchy feet.

Like the independent film-makers in the rest of the world who are prepared to take a gamble, PD is prepared to experiment a little as well and unlike the indies, have the advantage of little or no overheads and the ideal environment of being able to do what the hell they like.

Tri-Heli 2 is an example of an odd mix of game styles taken from the like of Chopperlift and Boulderdash where a helicopter must be guided over a flat landscape. Under the ground, diamonds sit waiting to be dug up or in this case, blown out of hiding with bombs.

Using a limited amount of ammo, the player must collect two per level and return each in turn to the base. While this is going on, an enemy plane flies overhead, and will either dropping a huge ball of dirt to cover the blowhole and destroy any flying mechanism that may be

hovering in it, or place a turret on the ground that fires a laser beam directly at the unsuspecting player.

As each stage progresses, the land becomes higher and higher, making the gap between the hostile craft and the shafts to the jewellery smaller and therefore the situation more vulnerable.

On first playing, the graphics put you off because of the crude, Spectrum look. Underneath the surface though, lies an addictive and frustrating program where that one more go gradually creeps up on you as you try and progress to the next level. A curious and original title but one well worth taking a look at.



Shoot the ground, grab the diamond and get out before you're trapped by dirt

Freaked Out 2

Programmed by: Chris Sharp

Available from: LAPD

Fans of Oxyd have probably finished the highly regarded game months ago and are waiting for the next instalment with baited breath.

Until it hopefully surfaces, Freaked Out 2, while not being of the same classic stature of the aforementioned, is still a reasonable stab at puzzle-oriented arcade action.

The plot revolves round your spaceship that has broken down and subsequently hurled into some sort of strange world where you must guide your ship from the start position to the exit across the other side of the screen to escape onto the next level, taking another step on the road to freedom. Between you and this freedom are various floortraps, directional dictation arrows, creatures from other



Rush from start to finish before the time limit runs out

dimensions and other assorted baddies. The game is relatively good fun if decidedly rough round the edges when compared to the professional presentation and feel of Oxyd. For the time being though, this will have to suffice until something better comes along.

Lay your hands on me...

Caledonia PDL
250 Oldtown Road, Hilton
Inverness IV2 4PT
Tel: 0463 225736

Emerald City
PO Box 28
Southampton SO9 7HS
Tel: 0703 672577

Floppysop
PO Box 273
Aberdeen AB9 85J
Tel: 0224 586208

LAPD
80 Lee Lane, Langley
Heanor DE75 7HN
Tel: 0773 605010

Merlin PD
11 Grange Close, Minchinhampton
Stroud GL69DF
Tel: (0453) 882793

Power PD
3 Salisbury Road
Maidstone ME14 2TY

When we last reviewed EdHak, then at v2, about eight months ago, we found it below par in several departments. Now with the release of an improved v3, most of the problems seem to have been addressed, making it look pretty good value for such a versatile utility.

So just what does EdHak do? It is a small utility program that can be used for editing just about any type of file from plain ASCII text files such as README documents to binary files like programs and resource files. It doesn't stop there though — EdHak will also read disk sectors on hard and floppy disks and even let you hack into your ST's internal memory, byte by byte.

The program comes on a single disk with a useful 50-page AS manual and several other utilities. The manual is packed with information on hacking into boot and other disk sectors and areas of RAM and contains comprehensive information on ASCII codes and the Atari character set.

It contains a full list of keyboard short-cuts and has a useful appendix dealing with importing and exporting files from other computer platforms.

EdHak works either as a program which can be run from the desktop in the normal way, or as a desk accessory. Obviously desk accessories are far more flexible, as they can be called up from within other programs but there is a memory overhead to be taken into account.

As EdHak uses up some 116k in its full configuration, it takes quite a chunk out of a 1040 ST or even a 2Mb machine.

However, there is a cut-down version called Diary supplied on the distribution disk that takes up only 22k.

Where v2 had a strangely inflexible windowing system, either full or half screen, the new one has a fully resizable and movable GEM style window with a horizontal scroll bar which is a big improvement.

Unfortunately the rather clumsy menu still exists. Instead of having several menu headings in the usual GEM style, there is a single menu that drops down to reveal a double column of 16 options.

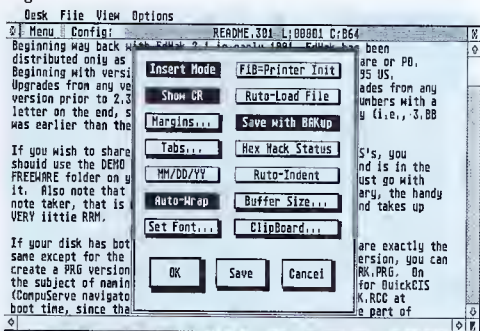
Selecting these brings up relevant dialogues but this rather bizarre nesting system means that accessing some important functions, such as font and buffer size or editing mode, takes at least three or four mouse clicks.

What's more, there's a distinct tendency to miss the EdHak menu and catch the GEM desktop ones instead which is far from merely irritating — it's damned annoying.

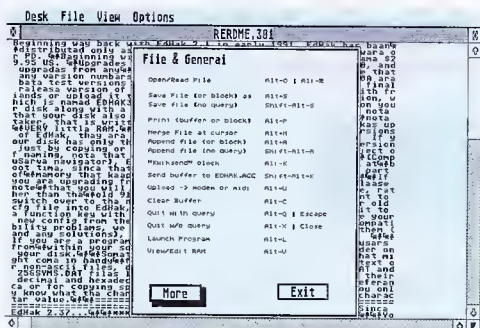
Other major changes include the ability to use smaller versions of the system fonts, extra block handling operations, enhanced macro selection and scores of

Polished text tool

Andrew Wright looks at the new EdHak, a commercial text editor which has recently jumped forward in leaps and bound



EdHak can be configured in dozens of ways



Online help is always available

minor improvements and bug fixes.

Block handling changes now include support for columns, the ability to apply quotes to a marked block and a complete set of dedicated drop down menus for block operations.

Perhaps EdHak's most intriguing feature, which now works in the program version under MultiTOS, is the ability to send text to the keyboard buffer and hence on to another application using its "kwiksend" facility.

Any size block can be sent in this way and it works with many programs including That's Write, Firstword Plus and PageStream.

EdHak has three standard modes. Text mode is for everyday use as a text editor and programming tool.

It could easily be used for word processing, as it has all the familiar

features like search and replace, word wrap, block cut, paste and delete and up to ten 80 character macros corresponding to each of the ten function keys.

In hack mode, all the characters are shown in lines 64 characters long and in hex mode they are displayed in the same form in hexadecimal equivalents. Placing the cursor on any character reveals its ASCII code in the status bar that appears in the window bar itself.

The number of the byte or character in the file is also shown, so you can easily find, for example, the 99th byte in a file by a simple trial and error process.

Another strength is the program's ability to handle files of almost unlimited size — its intelligent loading routines will read part of a large file into memory and buffer the rest on disk until it is required. In this way you can edit and hack big program or data files on a standard S20 ST.

If all you need is a cheap and cheerful way of editing ASCII files, there are much cheaper alternatives in the public domain but if you need more — such as the ability to hack into your ST's memory, examine disks and even co-operate with other programs such as QuickCIS and Stalker, EdHak 3.0 represents much better value than its predecessors.

It can hold its head up in a crowded market and it even works out cheaper than registering some of the shareware competition.

BOTTOM LINE

FEATURES

Interesting features and highly flexible.

Excellent
Good
Average
Bad
Appalling

EASE OF USE

Easy to use on the whole but the interface could do with a rethink.

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Not bad — the handy manual makes it worth a look.

Excellent
Good
Average
Bad
Appalling

Product: EdHak v3.02
Supplier: Douglas Communications
PO Box 115
Stockport SK2 6HW
Telephone: 061-456 9587
Price: £14.99
Configuration: All Atari in any resolution

Subscribe to the top value



Subscribing to **Atari ST User** means you reap all the benefits of the exclusive treatment you'll receive as a subscriber, and you get to choose one of these great **free gifts** as well

Save 8% on cover price
* UK

So, you're wondering, what exactly is this exclusive treatment? It's a whole range of things that ensure you get your copy of Atari ST User without any fuss or effort. As a subscriber

because you won't be scrambling down to the newsagents. You'll be snug and warm, content in the knowledge that you are part of the select, because your copy of Atari ST User is reserved for you personally. Before the masses have even thought about their monthly expedition to the shops you'll have had your copy for a few days, delivered direct to your door, postage free.

Not only do you already know the latest news and gossip, but you've also had first pick of the bargains on offer. Subscribing by direct debit means you save money and get an extra issue each year.

there are no worries about remembering when the next issue is on sale. You can watch your favourite soap or have a lie in,

ATARI ST USER SUBSCRIPTION ORDER FORM

Choose either a 12 issue or a quarterly subscription, which will start from the earliest possible issue

● I would like the following 12 issue subscription:

New	Renewal		
<input type="checkbox"/> 9452	<input type="checkbox"/> 9453	UK Subscription	£39.95
<input type="checkbox"/> 9454	<input type="checkbox"/> 9455	EEC Subscription	£54.95
<input type="checkbox"/> 9456	<input type="checkbox"/> 9457	Rest Of World Subscription	£74.95
		Canada/USA *	\$98

* Canada & USA subscribers send to: Europress (North America), Unit 14, Bysham Drive, Woodstock, Ontario, N74 1P1, Canada. Tel: 519-539-0200, Fax: 519-539-9725

● I wish to pay by:

Cheque/Eurocheque/Postal Order payable to Europress Enterprise Ltd

☐ Credit Card Expiry Date /

Card No.

● Deliver my magazine to:

Name (Mr/Mrs/Miss/Ms)

Address

Postcode Daytime phone no.

● I would like a UK quarterly direct debit ongoing subscription
9458 ☐ £8.49 per quarter (Complete the form below)

Quarterly Direct Debit Instruction

AUTHORITY TO YOUR BANK/BUILDING SOCIETY TO PAY DIRECT DEBITS

Name of bank/building society

Address

Name of account

Your account no.

Sort code

Signature(s)

Date

FOR OFFICE USE ONLY

Originator's Identification No.

Ref No.

Your instructions to the bank/building society:

● I instruct you to pay Direct Debits from my account at the request of Europress Ltd.

● The amounts are variable and may be debited on various dates.

● No acknowledgement required.

● I understand that Europress may change the amounts and dates only after giving me prior notice.

● I will inform the bank/building society in writing if I wish to cancel this instruction.

● I understand that if my Direct Debit is not paid which breaks the terms of the instruction, the bank/building society will make a refund.

Bank/building society may decline to accept instructions to pay Direct Debit from some types of accounts.

● Tick which option you want:

- 9447 ☐ Zool
9363 ☐ Two free issues and a magazine binder
9376 ☐ Alpha Data Mega Mouse and Logic 3 mouse mat
9372 ☐ Image Copy

● Send this form to:

Europress Direct, FREEPOST, Ellesmere Port L65 3EA. (No stamp needed if posted in UK.)

guide to your Atari ST!

Take out a subscription and you can pick a winner

Choose one of these free gifts

● Two extra issues plus an elegant Atari ST User binder

Save £13.93



Subscribe to **Atari ST User** and we'll send you a high quality, exclusive Atari ST User magazine binder. These specially produced binders will keep your magazines in mint condition, providing an excellent reference point, as well as keeping them stored away neatly. As well as this useful binder you also get two extra magazines. Your 12 issue order is extended up to 14 issues.

● Alpha Data Mega Mouse and Logic 3 Mouse Mat

Save £18.99

The well known Alpha Data Mega Mouse has ultra high 260dpi resolution with opto-mechanical encoder. The reliable micro-switch buttons provide effortless finger-tip operation. You can have all this and a high quality Logic 3 mouse mat absolutely free when

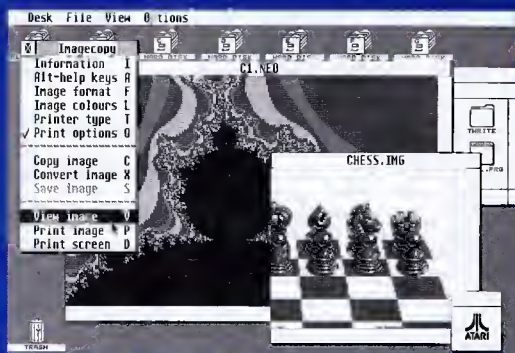


SUBSCRIPTION HOTLINE
Tel: 051-357 1275
Fax: 051-357 2813

IMAGE COPY

Save £10

The best black-and-white graphics conversion utility for the ST



ZOOL

Save £25.99

The Gamer Gold award-winning Ninja of the Nth dimension can be yours absolutely free.

"Zool is probably the best platform title you're ever likely to see on the ST. Neat graphics coupled with a brilliant gameplay make the antics of Zool a winner from start to finish."

Gamer, Atari ST User November 1993



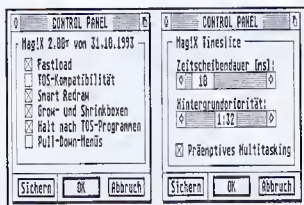
A few months ago, multitasking on the Atari ST was limited to a few simple task switchers. But then, together with Atari's MultiTOS, third-party developers also joined the arena.

Mag!x (sic), or the Multi Application Graphics Interface eXtension, actually pre-dates MultiTOS and can lay claim to being the first multitasking system for the ST – if we ignore the simple task switchers.

Now at v2, it adds a number of new features and is more compatible with Atari's MultiTOS. However, before we plunge in, a few words about multitasking in general, since there seems to be a lot of misunderstanding of the subject even among assorted so-called Atari experts.

There are basically two types of multitasking: pre-emptive and co-operative. The latter requires programs to behave and co-operate with each other. Pre-emptive, on the other hand is much more rugged and multitasks whether the programs want it or not.

Mag!x 1.0 was born as a co-operative system which would multitask only when a program issued a GEM call. Mag!x 2.0, however, has grown into a full-blooded pre-emptive multitasking system where



Two CPX modules used to configure Mag!x

to boot from. This can be either your hard disk boot partition or a floppy. Next, you can set the default directories for ACC, Auto-APP and scrap files.

If you leave the ACC setting empty, the system will load accessories as usual from the root, but it's much neater to have all your accessories in a folder.

Auto-APP folder is where all GEM applications you wish to run at boot time are stored. When Mag!x comes up all these application will then already be up and running as separate tasks. If you leave this setting empty no APPs will be run at boot time.

If after installing Mag!x you later wish to run your old GEM setup again simply hold down both Shift keys during the boot procedure and Mag!x will not come up.

Various Mag!x presets and configura-

tasking TOS but reveal their latent bugs in a multitasking environment.

Smart redraw is exactly that, it avoids unnecessary GEM redraws and so speeds up screen display. The screen is further accelerated by turning off the grow/shrink box animation effects. You can also change the way menus appear by choosing between GEM drop-down or pull-down menus.

Actually, these are not real Mac-like pull-down menus but click-down menus. When this mode is on the menus will not drop down if you accidentally move the mouse into the menu bar area, instead you must click on the menu before it drops down.

TSlice.CPX lets you set the duration of each time slice in milliseconds (from 5 to 50) and the ratio of foreground to background processing time (from 1:1 to 1:64).

Default settings are 10ms and 1:32. The higher the time slice value the less overhead there will be but the multitasking will not be as smooth.

The lower the ratio, the more equally will the time be divided up between foreground and background tasks. So at a ratio of 1:1, Mag!x will behave like any other pre-emptive operating system.

Just like that!

the total available time is sliced up into (you guessed it) "time-slices". These units of processing power are then divided up among various programs.

There is a twist in Mag!x, however, because it doesn't work with priorities like MultiTOS where you can individually set the fixed amount of time each program gets.

Instead, Mag!x employs dynamic prioritisation. In other words the system adapts itself dynamically to user actions. This results in immediate response and background tasks are executed only when there is time.

Sometimes, during heavy user activity, the background tasks will be forced to execute so that they don't go completely to sleep but, in general, Mag!x continues to favour the user for as long as possible.

Because of this Mag!x feels faster than any of the competition. This is convenient for the typical user but the experienced programmer might prefer the freedom of setting the priorities individually.

The focus on speed is also reflected in the fact that Mag!x wastes less than one per cent overhead for multitasking – that is to say, it's almost as fast as a single-tasking system. Actually, multitasking Mag!x is faster than single-tasking GEM!

To install Mag!x simply run the installation program. The program can run with a minimum of 1Mb of memory but as with all multitasking, the more you have the better.

In the installation program you can select the default resolution and where

Now you can switch from program to program in an instant, navigating with ease and efficiency, thanks to Mag!x, a sophisticated third-party multitasking desktop. Don Maple waves his wand

tions are performed either in the MAGX.INF file or using the two supplied CPX modules which require you to have XCONTROL installed on your system.

MAGXCONF.CPX configures various system features. Fastload invokes fast floppy access. TOS compatibility takes care of programs which run OK in single

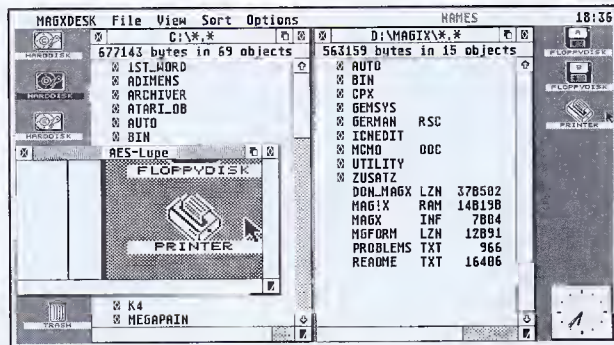
Finally, in this CPX the user can also turn off pre-emptive multitasking completely and run Mag!x as a co-operative system.

MAGX.INF file allows you to set all of the above and much more such as environment path, shell defaults and font defaults, to name a few. The commented listing explains all individual setting in detail.

MAGXDESK is the default Mag!x replacement desktop. Mag!x can handle up to 64 windows. Two features stand out in a Mag!x window: the backdrop button used to push a window/task into the background, and – a more cosmetic feature – the dot in front of executable files which makes them stand out nicely.

Clicking on the greyed-out area of a window's horizontal bar shows the amount of free space on that disk/partition. MAGXDESK also supports movable alerts and keyboard short-cuts both within dialogue boxes and menus.

TOS or TTP programs are automatically put into a window so that the Desktop is not disturbed. This task is



Default Mag!x Desktop called MAGXDESK running multiple applications

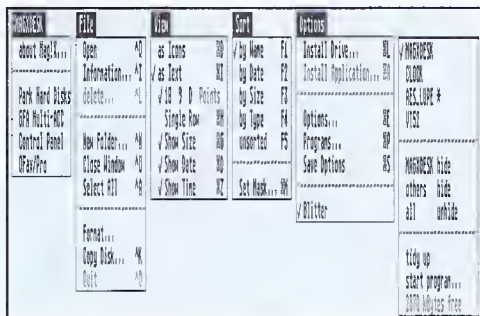
taken over by the VT52 program which has its own menu bar and opens the window within which the TOS program runs.

However, because all of this requires more work, TOS/TTP programs run slightly slower in a VT52 window.

Switching between tasks is done by clicking in the upper right corner of the screen. A "secret" menu then appears listing all tasks with a checkmark next to the currently active one.

This is similar to the way tasks are activated under MultiTOS where they are listed underneath accessories. However, in Mag!x this menu also has options to launch new applications and to tidy up the desktop if it's been destroyed by some rude program.

You are not limited to MAGXDESK, as the system is capable of running other replacement Desktops, the most popular of which seems to be Ease, by



Desktop menu functions at a glance

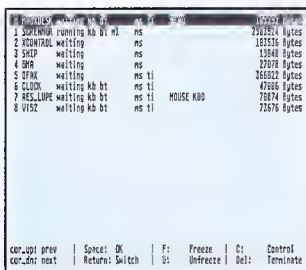
Application Systems of Heidelberg.

There are several utility and demo programs supplied with Mag!x. The demos include a clock and magnifying glass, which are a very good way of demonstrating multitasking at work.

Mag!x has its own icon format so an icon editor is provided to create and customise your own icons. A whole myriad of default icons are included as are additional programs for conversion between RSC and Mag!x formats.

A comprehensive and powerful CMD command shell has over 30 built-in commands as well as a bunch of external commands provided in the BIN folder.

There are also a couple of memory management utilities: MEMEXAMN shows all memory segments with their owners and LIMITMEM sets the maximum available memory to a program. And unlike MultiTOS, under Mag!x each



Pressing Esc-Control-Alternate invokes Mag!x task manager

A programmer's paradise

Mag!x is particularly attractive for programmers as it offers a number of improvements and features over the standard TOS, and yet to a large extent is MultiTOS compliant. There is also a C library on disk to take advantage of these new capabilities.

To get an "under the hood" look at multitasking press Ctrl-Alt-Esc to invoke the task manager which lists all currently active programs. Each line shows the application ID and name, its state ("ready", "waiting" or "running") and what particular event it is waiting for (all possible GEM events are shown), as well as the amount of memory occupied. The tasks can then be manipulated by, for example, freezing them or freeing them up.

program can be assigned a different amount of memory.

One important facet of multitasking is the ability to "talk" to other tasks. Unfortunately the only way to do that under Mag!x is via the Clipboard. Other more sophisticated ways of interprocess communication — such as semaphores and pipes in MultiTOS — are at this time not available, although they are under development.

The other important facet of multitasking is memory management as provided by the PMMU (Paged Memory Management Unit). MultiTOS supports it while Mag!x doesn't.

PMMU is a piece of hardware (either as a separate chip or incorporated in the main processor) that "watches" over programs and only allows access to a program's own memory. This prevents programs from running wild and crashing the whole system. However, this applies only to machines with a PMMU such as the TT.

Both BIOS and XBIOS under Mag!x are re-entrant, as is the AES. That is to say, any system call can interrupt any other system call. This can carry on for as long as there is stack space.

New Mag!x AES functions correspond to all of the new MultiTOS functions and more. Programs can be invoked by other programs and run in parallel. Other AES improvements comprise new object types.

The Mag!x manual is very good especially when compared to anorexic MultiTOS documentation. The first half of the Mag!x manual explains the installation and usage of supplied programs.

The second half, the reference section, is especially attractive for programmers as all new routines and improvements over old system routines are clearly explained with examples.

So how does Mag!x measure up against the competition? Geneva as a co-operative system is on the outset inferior to a pre-emptive system. It's also in its early development stages while Mag!x 2.0 has been around much longer and is very stable.

The comparison with MultiTOS is closer and also more important. The biggest drawback of Mag!x is that it does not run on the Falcon. However, the

programmers are hard at work even as we speak to rectify this.

There are also other features of MultiTOS not available in Mag!x (again under development) but Mag!x also has features not available under MultiTOS.

The biggest plus is its speed. It's like running an accelerator and getting the multitasking thrown in for free. This makes it particularly attractive for owners of older and less powerful STs in which MultiTOS is so slow it's almost unusable.

And in Germany, Mag!x is quite popular, and Mag!x-awareness is a must for



Mag!x version 2.0: a new powerful multitasking system from Germany

any new application programs being developed today.

BOTTOM LINE

FEATURES

Very fast for the user but the programmer may require more features. Does not run

Excellent
Good
Average
Bad
Appalling

EASE OF USE

For the user very intuitive and the programmer gets all the help in the manual.

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

A good investment especially for owners of older STs.

Excellent
Good
Average
Bad
Appalling

Product: Mag!x 2.0
Supplier: System Solutions, Windsor Business Centre, Vaneikant Road, Windsor SL4 1SE
Phone: 0753 832212
Price: £69.95
Configuration: All STs/TTs except Falcon, 1Mb req'd, 2Mb+ and a hard disk recommended

BEST FOR VALUE WITH

FULL DOUBLE SIDED DISKS

Compare our Contents with other Suppliers
& see who's the best for Value

FAST SERVICE, RELIABLE,

TOP QUALITY

(we only use the best)

JUST A FEW EXAMPLE DISKS FROM OUR COLLECTION.
WE HAVE OVER 1,000 MORE DISKS TO CHOOSE FROM, ALL JUST AS FULL.

BUDGIE CLASSIC RELEASES

LIC12 Ace Invaders

LIC37 Mr Dig

LIC104 JetPac

LIC30 Quest for Galaxia (Galaxiums)

LIC70 Pacman St

ARC04 TETRIS, superb Tetris game. KLAX TRIX, WELTRIS & TETSIDIE, 3 more good games on the Tetris theme. MR DICE, COLLAPSE & BURGER, 3 more good games to fill this super value disk.

ARC12 BELUM INTERACTUM - Good galaxians clone. BLOCKADE, HAUNTED HOUSE, AMORTRACK, BOING, INVADERS, MANIA. Another superb selection of arcade games.

ARC 14 HOME, and L'ORB 2 super pinball games. GALTIC RANGER, unusual shoot 'em up. MONKIES & BALLOONS, bounce the clown and burst the balloons. FIRESTORM, another good arcade game rescue the humans. LAZERBAL, super game and interesting version on the pinball theme. Also on this disk LOST TREASURE, WIDOW MAKER, SLOWLY & BREAK OUT.

ARC 20 BLAT. Superb STE ONLY falling blocks game. 10 fun filled levels. Superb DMA sound, will work with 512k but is a real treat on 1Mb machine. Great graphics.

ARC37 LLAMATRON, and REVENGE OF THE MUTANT CAMELS. 2 superb games from Jeff Minter. These are a must for any game collection.

ARC43/44 PSYCHOPIG 2. 2 Disks at 1mg only £2.50.

ARC53 REBOUND. Super bat and ball game from DCS. 1mg only.

WPR01 ST WRITER V4.2 and FIRSTWORD. The best word processors for the ST(G) plus a spell checker, print spooler and a selection of ready to use letters.

WPR03 ALICE. Super text editor up to 10. EDTEXT. In memory at once. EDTEXT. Super little text editor. Ideal for beginners. NEWORD 400v3. Easy to use text editor, again

good for beginners. NOTEPAD. Make temporary notes from within any gem program. PHONEPAD. Pop up telephone book. FILOFAX and ORGANISER. Everything a paper filofax would have and much more in these two programs. TYPEWRITE - Turn your ST into a typewriter.

WPR 09 LEXICON. A pure word list containing 46,209 words without slang, americanisms or other rubbish. Needs 1Mb to run with SPELLONE (spellchecker) also provided on this disk.

BR001 MONOPOLY, LAZER-CHESSE, OTHELLO, CHECKERS, WHEEL OF FORTUNE and more. A superb collection of BOARD GAMES.

BRD 04 CHESSE, superb chess game. DECODER, excellent mastermind. SUPER SIMON, computer version of hand held game. DOMINOES, puzzle game. GOLF card game. Also on this disk DRAGON MAZE, 2 game. SENSORI BACKGAMMON, BRIDGIT, ST ARTREK, BATTLESHIPS.

BRD05 AMERICAN FOOTBALL, DALEKS, STARTREK, DELTA 3, CELESTIAL CEASERS (versions 1 and 2), SPACE WARS, RED ALERT, MATCH, HANOL OGRE. 11 Board and Strategy Games. SPLENDID SELECTION!!

BRD09 MILE Excellent board game. D FISSION. Super Othello type game. TUNNEL VISION Excellent maze game. 3 jigsaw puzzle games. ST TIC TAC TOE, HIGH-LOW, BLACKJACK and more on this disk.

BRD 16 COURSE FISHERMAN. Superb treat for any angler. Needs 1 Mb to run, 12 different venues. Whole host of variations in tackle. A great way to while away the hours when you can't get to the bank.

ADV 01 ODST, DUNGEONS & DRAGONS, Role playing adventure. PARANOIA,

ENCHANTED REALM and ELBOZO CITY. 3 more good adventures also on this disk.

ADV 27 FATEMASTER. Fantasy graphic adventure.

AST 01 PLANETARIUM simply the best PD Astronomy program. SKYMAP another great Astronomy program plus aSTronomer.

00007 THE WORLD OF STARTREK. Over 300K of text interviews and biographies from the original STARTREK and NEXT GENERATION plus loads of pictures from both series. A must for all TREKKIES!!!

ART 07 Superb art package, ideal for simple DTP. 23 built-in fonts. A4 size paper works in monochrome for best quality of print. Ideal for leaflets etc. DS Disk.

UTL134 SAGROTAN. Must be the best virus killer around. V.KILLER v3.84. Another excellent virus killer. EXORCIST. The latest version of this V.Killer. HD RESTORE. Repairs hard drive boot sector. RIPPER and PROBE. Two programs to grab music and graphics from disks and more...

UTL144 ZX SPECTRUM EMULATOR. Needs 1Mb SPECTRUM to ST DOWNLOADER. Gives details on how to transfer Spectrum games from tape to disk for the above emulator. 10 pieces of Spectrum software.

SUNDRIES

Dustcovers	£3.50
Mouse & Joystick extenders	£4.75
Mouse Mats	£3.50
10 blank disks	
Inc. labels	£5

We also have a selection of 46 commercial games at under £3.00 each

WIZARD P.D.
178 Waverley Rd, Reading, Berks, RG3 2PZ Tel: 0734 574685

24 HOUR ORDERLINE 9am - 9pm Human 9pm - 9am Answerphone Monday - Friday
WE ARE NOW OPEN SATURDAY 9am - 12 noon

For disk catalogue send blank + SAE OR 70p

P.D. Disks.....£1.75

Budgie Disks.....£2.75

50p postage + packaging on all orders under £10

Family Roots

Family Roots is an invaluable aid to both professional and amateur genealogists. It is designed around an integrated workbench which allows you to create your family tree graphically on the screen by linking directly between the individuals. The powerful database can be viewed instantly at the click of a mouse button. The search function enables fast cross referencing and multiple scanning.

What The Press are saying about Family Roots:-

"I can certainly recommend it if you are working on a family history - Family Roots is going to simplify your record keeping enormously and is a pleasure to use." - **Micro Computer Mart**

"Certainly more than you'll ever need, unless you manage to trace your relatives back to Fred and Wilma Flintstone." - **Atari ST User**

"All in all, the best genealogy program available for the ST and well worth the money if you are considering tracing your family." - **ST Format**

To order your copy of Family Roots, send a cheque or postal order for £24.95 to the address below. UK postage free, please add £1.50 for Europe or £3.00 for Rest of World.

A disk with useable demos of Family Roots, Around The World, Stone Cold Sober and Professional Virus.

FALCON Software

OVER 2,500 DISKS OF TOP QUALITY
PUBLIC DOMAIN AND SHAREWARE
for the ST, STE and FALCON

FALCON Software

After many years supporting the Atari ST, Floppyshop were the first company to offer PD and Shareware for the Falcon 030. Unlike some PD Libraries who advertise Falcon software and copy the disks on PCs, we have had a Falcon for over a year and actually take the time to test the software on our machine, ensuring a professional service all round. Both our catalogues are currently the most comprehensive available from any supplier. Over the coming months, our support will further extend into several new commercial releases of our own, all of which will be compatible with the new machine. We also have Falcon specific software under development. This in no way lessens our commitment to our ST and STE customers. We remain firmly behind the entire ST range. Our catalogues are disk based and simple to use. It has a powerful search facility and can output to printer if required. Floppyshop are also distributors of the Budgie UK Licenseware range. For a free copy of either catalogue disk, send us a blank disk with a note of your name and address, stating whether you require the ST or Falcon catalogue. Alternatively you can send a Cheque or PO for 80p and we'll supply the disk. Please make Cheque or PO (UK currency only) payable to Floppyshop. Major Credit Cards welcome. UK Postage FREE. Overseas Postage to: Europe £1.00 per order, Rest of World 10% of order value (minimum charge £2.00).

COMING SOON...

ChromaStudio 24 - The Ultimate Graphic Tool for your Atari Falcon, is in the final stages of development. It will set the standards that others will follow, in art, animation, morphing and image processing, making it the most all encompassing program of its kind on any computer. Chroma is expected towards the end of the year, watch this magazine for release date and price.

Floppyshop

, Dept STU, PO Box 273, Aberdeen, AB9 8SJ

TUMBLEVANE PDL

6, West Road, Emsworth, Hampshire, PO10 7JT
Telephone: Emsworth (0243) 370600

GAMES & ADVENTURES

GM 101: Psycho Pig 2 (2 disks)	GM 109: Colour Clash
GM 111: The Glass Buttock of Tharg	GM 112: Rebound
GM 114: Colour Angler	GM 115: The Obscure Naturalist
GM 119: Insectoid	GM 120: Braindamage
GM 097: Fatermaster	GM 027: Monopoly
ADV 09: PORK 2	ADV 28: A Night on the Town
ADV 31: Susan	ADV 32: Christian Adventure
ADV 35: Deena	ADV 38: Darkness is Forever
ADV 41: Windfall	ADV 46: Storms
ADV 49: Alice in Wonderland	ADV 52: Heavy Bunch/Investigation

MUSIC AND MIDI

MUM 26: Alchime Jr, Sequencer +200 tracks
MUM 53: Kawai K1-cx2, Hi-res, 1Mb
MUM 55: Yamaha SY22 Editor, Hi-res, 1Mb
MUM 56: Guitar Professional, learn those chords
MUM 58: Roland 'D' series Sound Banks

ART AND GRAPHICS

AAG 29: Paintpot, best half a meg package
AAG 31: Metafile Format Objects
AAG 35: Creative Titles, Video title
AAG 39: Atari Image Manager V1.96, 2 disks
AAG 05: Crackat V1.0 with ENGLISH docs, 1Mb
AAG 38: Crackat V1.36 NO english doc (yet), 1Mb

EDUCATIONAL

EAC 01: Maths Test, for the under 10's
EAC 02: Body Search, Basic Human Anatomy
EAC 20: Teltale Chemistry, GCSE Levels A, B, C
EAC 21: CIA World Factbook, Info on over 240 countries, 4 disks
EAC 29: Workout, A learning aid

WORD PROCESSING & DTP

WPD 01: ST Writer Elite	WPD 03: Typing Tutor
WPD 19: Printing Press	WPD 22: Printing Press extras
WPD 23: D8 Writer	WPD 24: D8 Writer support disk

UTILITIES

UTA 28: Award Maker, create your own certificates
UTA 34: D8 Master, create your own databases
UTA 38: 5 Databases, one has got to do the job
UTA 51: 70,000 word spell checker
UTA 53: German Translate, 27,000 words

POSTAL CHARGES

Please add the following amounts to your order

1-5 disks.....	50p
6-10 disks.....	75p
over 10 disks.....	£1.00

Catalogue with FREE PD £1.00 or 50p with order
Disk prices: £1.50 each

Lots to do this month, and all about dialogue boxes!

Firstly, load your RCS (Resource Construction Set) into your ST. If you don't have an RCS, get one – any will do. I used a public domain program to build the dialogue box on the CoverDisk.

Now read the OTHELLO.RSC file on the CoverDisk into your RCS. If you're using it, it will also read OTHELLO.DEF, to assign symbolic names, otherwise your documentation will explain how to assign names, and later on I'll explain why you'd want to.

The first thing you'll see is an icon representing a dialogue box. Double-click on it and the new Othello dialogue box will be displayed.

The box was built by moving items from the parts box, stretching or shrinking them, putting them where I wanted them to be, then changing their attributes by double-clicking on the object. The trick lies in knowing what the attributes are and what you can do with them.

A dialogue box consists of a tree – a hierarchy – of OBJECT structures. The root of the tree is the box surrounding the dialogue, and its children are the OBJECTs which lie within that box – buttons, strings, and the rest.

Any of these children can also have children – all the items inside them – and so on. All OBJECTs which lie entirely within another are its children – the grandchildren of that OBJECT's parent.

This can get pretty complicated, and that's why you're using an RCS to build the dialogue box – it takes care of the details, leaving you to concentrate on designing your box.

There are eight different kinds of OBJECTs available for your dialogue box: boxes, boxchars, buttons, strings and TEDINFO structures. For now, we'll ignore the remaining three – icons, images and user-defined objects.

Boxes are just rectangles on the screen, which may or may not be actually drawn as boxes. If you examine the attributes of a box, such as the one encompassing our Othello dialogue, then you'll see an attribute, Thickness, which can be adjusted to set the thickness of the line which outlines your box.

If its thickness is zero, your box will not be drawn on the screen, but simply groups together a lot of other OBJECTs as its children.

A boxchar is a box with a single character displayed at its centre, while a button is a box with an entire string displayed at its centre. And a string, of course, is just a text string displayed in your dialogue box. Finally, a TEDINFO

Roy Stead opens up
a dialogue and starts
to make things
happen with his
Othello program



letters and space; n for any letters, numbers or a space; F for all valid filename characters plus ?, * and ; ; p for all valid filename and pathname characters plus \ and ; ; P for all valid file and pathname characters plus ?, *, \ and ; ; and, finally, an X permits anything to be typed at that position.

One word of warning: If the first character is an @ symbol, then the TEDINFO will be displayed as if blank regardless of what comes after it (useful for password entry).

From EDITABLE, we can go on to the rest of the flags which can be associated with any OBJECT. And remember the "any" in that sentence.

If an object is selectable then it will be inverted when the user clicks on it, and have its state set to selected. Clicking on it again will reverse the action.

If the EXIT flag is set then the dialogue box will terminate when the user clicks on that object and the object – if it's a button – will be drawn with a double-thick border. But, remember, the user can only really click on the object if it is also selectable.

The TOUCHEXIT flag also causes the dialogue to terminate when the OBJECT is clicked, but doesn't provide the double-thick border to a button. TOUCHEXIT also offers another feature, which is dealt with later on.

If an OBJECT has its DEFAULT flag set then it's drawn with a treble-thick border. The DEFAULT object is the one

Getting boxed in

structure. These are used in our dialogue for the player's names, and are a special kind of string which can be drawn in any colour or different fonts, and positioned to the left, the right or centred within a box; the thickness can be set just as with any other box.

If the EDITABLE flag is set on a TEDINFO structure, then the user will be able to edit the text inside it when the dialogue box is in use.

Incidentally, the Template field of a TEDINFO is what is displayed in it when there is no text at that point, while the Validation field is used to set the sort of characters which the user is able to type at that point in the string.

Characters which can be used for this are 9, which allows only a digit from 0 to 9 to be typed at that position; A, which allows only upper-case letters and spaces to be typed (a allows any letters and spaces); N for numbers, upper-case

activated by pressing the RETURN key, as well as by clicking on it.

To turn to object states: Aside from SELECTED, which I've already mentioned, states available are CROSSED, CHECKED, OUTLINED and SHADOWED.

These are fairly self-explanatory, being concerned with the object's appearance only. The final state, DISABLED, causes the object to be shown greyed out, indicating that it is not available for use. When setting DISABLED, however, remember also to switch off the SELECTABLE flag.

An object's flags are held as a BitMap in an int, ob_flags, in that OBJECT's structure. Its states are held in the same way in the field ob_state, which is also an int. If an OBJECT has no flags set, or to switch off those already set, use the name NONE. The equivalent symbolic



name for states is NORMAL.

We've mentioned all of the states now, and all but one of the flags. The final flag is called RBUTTON, for Radio Button, and is named for the station-selection buttons on a radio which, when you push one in, all of the others pop out so that only one is switched on at any one time.

Radio buttons are used in three places in our Othello dialogue, and they are set up quite easily – the group of radio buttons are all gathered together as the children of a single box, and each has its RBUTTON flag set. GEM itself takes care of the fact that only one is to be switched on at any one time.

We could talk for hours about OBJECTs, but the best way to learn about them is to play with the different attributes from inside your RCS. For now, we'll move on to how to make use of a dialogue tree once you've saved it out as a .RSC file.

When you save the dialogue, you will notice that a header file with the same name is created. This contains the symbolic names – which you assigned to the objects – to be used to refer to the different items in the box. The first of these we're interested in is the name given to the box itself.

But the first thing to do is to load our .RSC file into our program. We do this by calling `rsrc_load()` with a single argument – a string containing the name of the file. If there's an error, zero will be returned, otherwise the file loaded OK and we can proceed.

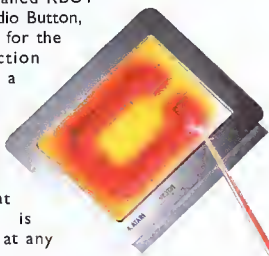
Before our program exits, incidentally, we'll have to make a call to `rsrc_free()` – no arguments – to free up the memory taken up by the .RSC file. All of this is done, in Othello, in the GRAPH.C file.

When we come to use the dialogue, we need to call `rsrc_gaddr()` to find out the address of its OBJECT tree. This function takes three arguments. For simplicity's sake, you can always use the symbol `R_TREE` for the first argument.

The second is the name given to the dialogue box's root object (in this case, OTHELLO), while the third is a pointer to an OBJECT pointer. After the call, the OBJECT pointer will be set to point at our dialogue box's object tree, which is a simple memory block just like any other. This, and all that follows, can be found in DIALOG.C on the CoverDisk.

After all that we've covered, actually executing a dialogue box is a piece of cake. The first thing is to make a `form_center()` call, like so:

```
form_center ( tree, &rect.g_x,
             &rect.g_y, &rect.g_w, &rect.g_h );
```



Where (OBJECT *)tree was set by the `rsrc_gaddr()` call, and (RECT)rect is to be set to the screen rectangle of our dialogue box – which has now been centred on the screen.

The next stage is to make one or two `form_dial()` calls. The first uses the symbol `FMD_START` and is mandatory. This is used to tell GEM to reserve an area of the screen for our box.

The second – using `FMD_GROW` – is optional, and simply draws a Zoom Out box from the centre of the screen to where our dialogue box will be.

`form_dial()` takes nine arguments. The first is the symbolic name mentioned above, the following four are all going to be zero, and the final four ints make up a GRECT for the screen rectangle to affect. So:

```
form_dial ( FMD_START, 0, 0, 0, 0, 0,
            rect );
```

will reserve the screen rectangle described in (RECT)rect, ready for our dialogue box. Once we've finished with our dialogue box, incidentally, we make one or two more `form_dial()` calls.

The first, this time with the symbol `FMD_SHRINK`, is optional – drawing a shrinking zoom box. The second – using `FMD_FINISH` – is mandatory, and restores the rectangle used by the dialogue box for the use of the rest of the GEM system, automatically sending redraw messages to any corrupted windows.

In between the `form_dial()` calls, we

want to first draw our box and then execute it. The first is carried out by an `objc_draw()` call:

```
objc_draw ( tree, obj_no, MAX_LEVEL,
            rect );
```

Here, (OBJECT *)tree and (RECT)rect are as before and MAX_LEVEL is a standard symbolic name to indicate that the object, and all its descendants, are to be drawn (if you use zero here, only the object itself will be drawn; 1 to draw its children also; 2 to include grandchildren, and so on).

The `obj_no` value is an int which is the offset of the object to draw – for which you just use the symbolic name from the RCS, which was later saved out in the header file. Since we're initially drawing the entire dialogue box, you would use OTHELLO in place of the (int)obj_no value.

The final thing to do is to actually execute the dialogue box, and this is done using a `form_do()` call. `form_do()` takes two arguments – the pointer to the OBJECT tree and an offset to the OBJECT which the edit cursor is to initially be within. If there are no EDITABLE OBJECTs, you should use zero for the second value.

GEM will then take care of everything else for you, leaving `form_do()` only when an object with the EXIT or TOUCHEXIT flags set is selected by the user, and returning an int which is the offset to the object clicked on to exit the dialogue.

If the object was a TOUCHEXIT then the high-bit of the returned value (& 0x8000) will be set if a double-click was used to exit the dialogue box.

And manipulating and examining the array of structures which make up the dialogue box's OBJECT tree can be done as easily as with any other array of structs – examples abound throughout the DIALOG.C file.

● Next month, in the last column of this series, we'll convert Othello into a desk accessory and tie up a few loose ends.

Getting to grips with C

Did you miss out on a free copy of HiSoft C, given away with the April issue of Atari ST User?

Or maybe you missed one or more parts of this guide to programming in C?

If so you can still get hold of back issues by telephoning your credit card details to 051-357 1275.

Alternatively, send £3.50 for each issue required. Cheques/Eurocheques should be made payable to Europress Direct and sent to Freepost, Ellesmere Port, South Wirral L65 3EB.

Please state clearly which issue/s you require.

Too much Falcon

Whoa! Stop! Cease! The Falcon is a most wonderful piece of kit, on that we are all agreed. However, at the moment it is far too expensive.

My experience with the ST has taught me that the Falcon will be next to useless without at the very least 4Mb of memory and a hard drive exceeding 100Mb.

At £900 this is out of my price range. I have invested a lot of time and money on software and hardware for my ST, which I am reluctant to give up without good cause.

The point of this letter is not to denigrate the Falcon, but merely to point out that I shall not be buying the machine within the foreseeable future.

As such I am fed up with buying your magazine, which is supposed to be for my ST computer but which appears to be for the Falcon, with an occasional article thrown in for the ST.

Enough is enough, let's get back to the ST, thank you very much.

D. McGeachie, Nottinghamshire

Our readership is split between people who use their Atari computer for games and home productivity software, enthusiasts and professional desktop publishers and musicians.

Same readers fall into more than one category but the single thing that unites them is their interest and enthusiasm for all things Atari.

The Falcon is a step forward in terms of technology, and although it remains financially out of reach of most readers a recent reader survey showed most want to read about it.

Nearly all new software released for Atari computers has been launched because of the Falcon's improved copability but is compatible with older machines.

When it is reviewed we mention which features are not available on STs, ensuring readers can make buying decisions based on what they read. Even after saying this,

Got anything to say to the ST community?
Then this is your soapbox

Write Now

most editorial space in Atari ST User continues to be given advising readers how to get the most from the ST.

My kids buy porn

I have just discovered that my kids and their friends have been obtaining pornographic disks from New Age PDL advertised in your magazine.

There are quite enough public domain disks to sell and distribute without the above – quite unnecessary in my opinion.

The ads in my house have been thrown in the fire but I had to go round the other parents concerned, which was very embarrassing for all of us.

Some parents were furious with their kids – and with me for providing the magazine which was the source of the advert for these disks.

I am not particularly a prude but to supply disks like this to children – it must have been obvious from their handwriting which is far from adult – is disgusting.

Until you stop supporting this firm I shall

stop supporting you. Remember this is my money that supports you, the ST, the hardware and software suppliers. Ignore us at your peril.

We don't need you, you need us. We have always the choice to change to something else. Give serious thought to this.

Mr Jefferson, address not supplied

What is pornographic to one person could be perfectly acceptable to another, and I think it is likely that this is the problem here.

As has been mentioned several times during recent months, Atari ST User has a policy of not printing adverts which contain pornographic material.

We have looked at the disks which New Age claim to be selling through their page, and none contains anything more pornographic than women in bikinis.

Pictures like this – and worse – are printed each day in national tabloids and cause little offence to their readers.

Finding the route

In your Christmas issue you reviewed a program called Route Finder. As much as I tried I could not find the address of the program's supplier.

Would it be possible for you to print the address in your next issue? I think that Atari ST User is the best of its kind on the market.

I especially enjoyed the double disk issue – could we possibly have a larger communications section, and how about a regularly updated bulletin board telephone directory?

M. Boilev, Nottinghamshire

Sorry, it appears that the gremlins struck the Christmas Public Sector pages.

Route Finder can be bought from L.A.P.D. at 80 Lee Lane, Langley Hearn DE75 5HN. Alternatively, you can telephone the library on 0773 605010.

Needing support

Since May I have been the proud owner of a Falcon and enjoy using it very much. I've never before seen such a user-friendly operating system and been able to do whatever I wanted in just a few days.

There is still a problem, however. Most of the games and some of the other software I used on my ST don't work. I wasn't surprised, since I am aware that I am dealing with a computer containing different internal hardware.

What surprises me, however, is that software houses don't get their new ST titles to run on the Falcon as well. This can't be too hard to achieve, I guess. Why, for example, doesn't Zool run on a Falcon? It would be a perfect game for my favourite bird with its blitter and 32-bit processor. And so would other games.

Luckily, I recently got hold of a program called Backward which claims to be an ST emulator. It turns off some chips which are not in the ST, sets the clock speed to 8MHz and does other clever things too. It works fine and now I am able to play about 70 per cent of my games.

Some are even at improved speed. Try, for example, Midwinter 1 and 2, FI GP, F-19, Populous II and more games that can use speed-improvements. Therefore, I think it's quite a shame to see that some newer titles – like Dogfight and Civilisation – don't work on the Falcon, not even with Backward.

Is there a way to persuade the software houses to write Falcon-compatible software? I think Falcon owners should start writing letters to ask them to give in to our pleas.

That way the Atari market will become more profitable for them and all Atari users will be happier. What more can you wish for? More Falcon-specific software.

Peter Laras, The Netherlands

Most productivity and professional application software is now enhanced for use with the Falcon, although as you say Peter, nearly all games remain incompatible.

Atari say they are planning to launch five Falcon games within the next few weeks, and I believe Daze Marketing have a couple of titles due before summer.

£25
Prize
Letter

Waiting to hear from you...

To join the ST chat show drop a line to
The Editor, Write Now, Atari ST User,
Europa House, Adlington Park,
Macclesfield SK10 4NP

Picture formats

I am a beginner to assembly programming and am starting to learn about screen and graphics manipulation. I am having difficulty with obtaining information on Neochrome and Degas Elite picture formats.

Please could you help with any information on these particular formats as I am at my wits end?

S Jones, Crewe

No problem. The formats for Neochrome and Degas Elite picture files are as follows:

Neochrome file format (.NEO)

1 wordFlag (always 0).
 1 wordResolution (0=low, 1=medium, 2=high).
 16 wordsColour palette.
 12 bytesFilename (usually left blank).
 1 wordColour animation limits. If the colour animation is valid, the high bit is set. The low byte contains the colour animation limits with the most significant bits representing the lower limit and the least significant bits being the upper limit.
 1 wordColour animation direction and speed. The low byte is the number of frames or Vblanks per step of colour shifting. If the value is negative, the colours shift to the left.
 1 wordHolds the number of colour steps to display the picture for before proceeding to the next one.
 1 wordImage X offset (unused and always set to 0).
 1 wordImage Y offset (also unused and set to 0).
 1 wordImage width (unused. Set to 320).
 1 wordImage height (unused. Set to 200).
 33 wordsReserved for future use.
 16,000 wordsActual picture data.

Total bytes = 32,128

Degas Elite format (.PI1=lo res, .PI2=med res and .PI3=hi res)

1 wordPicture resolution. 0=low, 1=medium, 2=high).
 16 wordsColour palette.
 16,000 wordsActual picture data.
 4 wordsTable of left colour animation limits. This includes the ranges for four animation ranges. The first word in this table and the first word in the table below are the first animation range and so on for the others.
 4 wordsTable of right colour animation limits.
 4 wordsAnimation direction table. Each word signifies the direction of animation for each range. 0=left, 1=right.
 4 wordsAnimation delay times. Every entry is equal to 128-delay in 1/60ths of a second.

Total bytes = 32,066

Second drive

I am very new to the ST scene and am about to splash out on a second drive. My main reason for buying it is to simplify and speed up file copying.

I am a student and use the ST as a word processor for my subject work. As such, I inevitably end up with lots of files of work on different subjects and of differing versions.

I soon got fed up with the way the ST handles file copying using just the internal drive, so a second drive will be invaluable for that as well as meaning my word processor sessions will benefit.

Can you recommend a suitable drive and give me some tips on what to look for?

L Robinson, Middlesbrough

A second drive certainly does simplify and speed up file copying, making the whole process much easier. You could alternatively use a RAM disk to make life easier, but this obviously has its drawbacks such as taking up memory. When looking for a

covers such topics as AES, GEMDOS, VDI, BIOS, XBIOS, MultiTOS, SpeedaGDOS, hardware and many other aspects of all Atari computers. Every function of TOS 1.0 through to TOS 4.0 is explained and many of the new features in TOS 5.0 too.

It is a valuable reference manual that no ST, Falcon or TT programmer should be without. The Compendium costs £39.95 and is available from HiSoft on OS25 718181.

Bleeping keyboard!

Every so often, when I turn on my ST, a continuous beeping sound emanates from the ST and the keyboard locks up.

If I ignore it and load some software, the keyboard still refuses to work.

This doesn't happen all the time and I am beginning to suspect it's a symptom of a virus. Please can you help?

B Williams, Strood

This problem is fairly common. It is due to

Advice

second drive, ensure it has its own built-in power supply as opposed to taking power from the ST itself.

In general, most drives from reputable dealers are as reliable as the next. Same drives however, offer extra features such as digital track readout, which is pretty much useless.

External drives are quite cheap too. Ladbroke Computing's Zydec external drive and Power Computing's PC720P cost a mere £55.

If you have a bit more to spend, Power Computing also have their PC720B which has extras like drive B boot facility and built-in Blitz Turbo backup hardware, all for £5 extra. The drive B boot facility allows you to use the external drive to boot from and the Blitz Turbo feature is an extremely fast disk backup package.

Ladbroke Computing can be contacted on 0772 203166 and Power Computing can be contacted on 0234 843388

Technical reference

I have been trying in vain to find a copy of the technical reference manual from Abacus called Atari ST Internal, but I have failed miserably. I would be grateful if you could tell me where to get hold of a copy and also any other reference manuals for the Atari computers.

R Dutton, Surrey

The reason you are having problems finding the Abacus manual is that it has gone out of print. However, fret not as HiSoft have come to the rescue with The Atari Compendium. It's a hefty tome and is the most comprehensive "all-in-one" technical reference manual for Atari computers yet. It weighs in at a massive 860 pages and

having an joystick plugged in which has a outfire feature turned on when you boot up. Simply make sure it isn't turned on when you switch on your ST and you should find the problem disappears.

Floppy problems

Having recently bought my Atari 520ST, I am experiencing some problems. I bought the computer second-hand and it works very well in itself.

The problems arise when I try to use my son's disks. He also has an Atari 520ST. Some of the disks work fine but 90 per cent of them won't work at all.

I tried to use the two disks from your December issue but was unable to get my computer to accept them. I kept getting the message that the disks may be damaged.

Could you please explain what could be wrong and if there is anything I can do?

D Sibery, Middlesbrough

It sounds as though you may have a single sided internal drive as opposed to a double sided drive, which are fitted as standard on later model STs. Early STs were fitted with single sided drives.

Try formatting a disk to double sided and then check the disk size by highlighting the disk A icon and selecting Shaw Information from the File menu.

If your disk is single sided, the figure will be in the 300k+ mark whereas double sided drives give a 700k+ figure.

If your drive is single sided, it is not possible to read any disks formatted as double sided.

Your son's computer can format single sided drives and it may be that the few disks from your son's computer which

worked fine just happen to be formatted as single sided.

No supply

Recently, my 1040ST has stopped working and I have been led to believe that the culprit is the power supply. My ST is quite an old model and I was wondering if you could suggest a company who could replace my power supply and possibly give it a good servicing?

K Brannon, Windsor, London

System Solutions (Tel 0753 832212) are the closest to you and are one of the most reputable companies who can repair your oiling ST.

They are officially authorised by Atari so you can be sure of a good job.

More memory

I have been considering upgrading my 1040STE's 1Mb memory for some time now and I would like to ask a couple of questions.

The lines are open 10am till 8pm Monday to Friday and 10am till 5pm on Saturday.

Faster ST

I am a keen, nay fanatic, fan of the Calamus SL colour DTP package and have reached a critical point in my use of it.

I use Calamus SL on my Mega ST4 and now find myself feeling the need for speed because screen updates are beginning to slow me down. I have already bought NVDI, a software screen accelerator which is very good, but it's still not fast enough.

Is there any hardware which is available that will increase the clock speed of my 8MHz Mega ST to double or more?

J MacFarlane, Yorkshire

System Solutions can provide you with what you need. Their hardware accelerators – the T28 and T36 – can speed up your Mega ST to either 28 or 36MHz respectively.

Both include a 64k cache which can be

zine, Atari ST Review.

The only restriction is that a manufacturer's "watermark" is printed across any pages printed with the cavedisk version. Other than that, everything else works.

Floppy failure

I am experiencing some very annoying problems with my Atari 1040STE's internal floppy disk drive.

About three weeks ago, whenever I tried to write to a floppy disk, I occasionally got the message "Disk in drive A: is physically write-protected", even though the write protect hole on the disk was closed.

Removing the disk to check it and then inserting it back into the drive and retrying usually cured the problem after a few attempts.

Now though, the write protect problem is permanent and I am unable to write or even format any disks at all.

Will I have to get a new drive or is there something I can do? I'm not bothered about opening up my computer and removing the drive to check it myself, so a few pointers will be helpful.

C Rastack, Gloucester

It seems the write protect mechanism may be faulty. Some drives use a mechanical

write protect mechanism while others use an optical method.

It is unlikely you will be able to repair it yourself as there aren't any serviceable parts to it. And it would be far cheaper to buy a new drive than to have it repaired.

Look through the adverts in this month's issue for prices of internal floppy drives – they generally start from as little as £40.

SERVICE

1. What is the maximum memory I can upgrade my STE to?
2. How easy is it to fit the memory? (I don't have too much knowledge of electronics)
3. Who are the best company to approach in terms of price and quality?

J Smith, Essex

Let's get straight to the answers shall we?

1. The maximum amount of memory you could upgrade to used to be 4Mb. However, Marpet Developments (Tel 0423 712600) have recently developed an upgrade board that can add an additional 8Mb to take the maximum up to 12Mb!

2. Fitting upgrades to an STE is much easier than fitting them to a ST. This is because most STEs have SIMM sockets which accept standard SIMM memory boards. Fitting these is just a matter of undoing your computer and plugging the extra memory in.

However, there is the danger of static damage to the SIMMs. So if you have not got a great deal of experience with electronics, take advantage of the fitting services which most dealers offer.

3. It is difficult to suggest one particular dealer as many of them offer equal quality of service. I suggest you flick through this month's issue and check with the various advertisers.

RAM memory has also recently undergone a major increase in price and at the time of writing, prices are fluctuating so check with each dealer for current prices.

You may also like to know that our sister magazine Atari ST Review are currently offering a memory upgrade service with 1, 2 and 4Mb upgrades costing £9.99, £49.99 and £99.99 respectively. For more information, call the order hotline on 0480 891171.

switched on or off and when combined with your copy of NVDI, you can expect a healthy improvement in performance.

The T28 costs £199 and the T36 costs £299. For more information about them, contact System Solutions on 0753 830344.

FANSI graphics

Can anyone give me the name of a comms package that will let me make use of the ANSI colour displays available on most BBCs these days? I have an Atari 1040STFM with TOS 1.02, double sided drive and external drive.

R Snipperley, Bucks

Freeze Dried Terminal v2.20 or higher is what you need. It's available as a shareware demo which will allow you to try it out and if you find it's the best thing since sliced bread, simply register and you are sent a "key" which will activate all the features. Most PD libraries worth their salt will have this in their collection, so give your favourite library a call and ask them for it.

Suitable DTP

I am looking for a low cost DTP package which will allow me to create personalised greeting cards which can take advantage of the mass of clip art which I have accumulated from various PD libraries. Could you please recommend a decent package which won't make my wallet cringe?

A Matthews, Kent

Timeworks 2 will fit the bill perfectly and a fully working version for you to try out appeared on the cavedisk of the Christmas 1993 issue of our sister maga-

Got a problem?

Are you at the point of taking an axe to your ST? Do you want to pulverise your printer? Well just count to ten and relax. Then, jot down the problems you are having, along with a detailed description of your setup.

Include information on the type of ST you have, the TOS version (if known), what peripherals are attached and any extra hardware that lurks inside your computer (accelerators, graphics cards and so on) and I'll do my very best to come up with a solution.

For those who have had problems and overcome them, chances are that someone somewhere is having the same problems and would benefit from your advice.

So get in print and send any tips or suggestions that other users may find helpful.

Send all tips and cries for help to: Darren Evans, Advice Service, Atari ST User, Europa House, Adlington Park, Macclesfield SK10 4NP

THE UPGRADE SHOP Tel 0625 503448

37 CROSSALL STREET, MACCLESFIELD, CHESHIRE SK11 6QF
Mon-Fri 9am-8pm, Sat 9am-5pm for orders and technical support.
Same day service available for upgrades and most repairs.

PLEASE RING BEFORE YOU BRING.,



All prices include VAT @ 17.5% but exclude delivery (see below)
Please make cheques payable to
THE UPGRADE SHOP.
1 year warranty on memory and other products. 3 months on repairs.
Prices subject to change without notice

UPGRADES AND REPAIRS

MARPET XRAM DELUXE KIT

For STF/STFM. These kits use, Simms to Upgrade to a maximum 4Mb. Same day fitting service available for only £10.00. If you have any problems fitting a kit, return it to us and we will be happy to do it.

XRAM UNPOPULATED£28.99
520 to 1Mb£37.99
520 to 2Mb£CALL
520 to 4Mb£CALL

DOUBLE UPGRADE 1MB XRAM AND 1MB DRIVE **£74.00**

FOR OTHER VARIATIONS PLEASE CALL

STE KITS

All STE kits include comprehensive fitting instructions and a ramtest disk. Same day fitting available for only £5.00

520 to 1Mb£9.99
520 to 2Mb£CALL
520 to 4Mb£CALL

REPAIRS

At affordable prices, fully trained engineers for a reliable repair. No fixed charge, all jobs are quoted for individually, standard 3 months warranty

We also supply and fit high density modules and drives, accelerator cards, PC Emulators, TOS 2.06 etc.

Fitting service only **£10.00**

SUNDRIES

POWER SUPPLIES for STF(M), STE

New plug in replacement£33.99

INTERNAL REPLACEMENT DRIVE KIT

High quality mechanism with instructions and standoffs
1Mb or 2Mb drive supplied£39.99

ELCO HIGH DENSITY MODULE

Double your drives storage capacity
(2Mb replacement drive required)£39.99

OVERSCAN FOR ST, STF(M)

Remove the border and get more workspace£39.99

TOS 2.06 FOR ANY ST

Update your operating system£57.00

PC SPEED EMULATOR ST STF(M), STE£60.00

AT SPEED EMULATOR ST, STF(M)£139.00

AT SPEED EMULATOR STE£149.00

REPLACEMENT 280 DPI MOUSE

Good quality very smooth£9.99

MONITOR SOUND BOX

Give your silent mono monitor sound£20.99

MONITOR SWITCH BOX

Switch between mono and colour mode£17.99

with sound£25.99

COMPUTERS

ATARI STFM and FALCONS
RING FOR AVAILABILITY

TUS HARD DRIVES

Full range of high quality SCSI hard drives available for the ST & Falcon.

From bare enclosures, cables, drives, etc. to complete systems, we can supply the one for you.

Please phone or write to the above address for a brochure of products.

TUS MONO MONITOR

The TUS mono monitor can be used on the ST, Falcon or PC without modification. Displays from 640 x 400 (ST - overscan compatible) to 1024 x 768 (Falcon or PC). Supplied with ST adaptor cable£129.00

DELIVERY CHARGES

Postal delivery for small items £3.00.
NEXT DAY courier delivery £7.00 (fully insured)
Courier pick up and return delivery service for upgrades and repairs £13.00

ATARI REPAIRS

Repairs undertaken to Atari computers at £49.95 inclusive of parts, labour, VAT and return postage/packing

Full technical support

Computers repaired in the quickest possible time

All machines will be overhauled with a full soak-test to ensure optimum reliability

Entrust your machine to the experts, full 90 day warranty

Repairs to disk drive and power supply also included
(extra charge possible if found to need complete replacement)

Repairs to other Atari systems undertaken - phone for details

Upgrades and expansions supplied and fitted - phone for details

£49.95

To take advantage of this exceptional offer, simply send or hand deliver your computer to our workshop complex, address details below, enclosing this advertisement voucher, payment, fault description, return address, along with your daytime and evening telephone number and we will do the rest.
Should you require Group 4 Security return delivery, simply add £5.00 to the repair charge.

COLLECTION SERVICE AVAILABLE



WTS Electronics Ltd Chaul End Lane Luton Bedfordshire LU4 8EZ Tel 0582 491949 (6 lines)

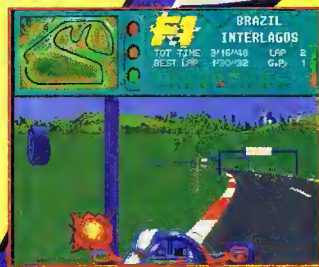
(We reserve the right to reject machines which, in our opinion, are beyond repair- Normal charge applies)

February 1994

ST ACTION

JAGUAR

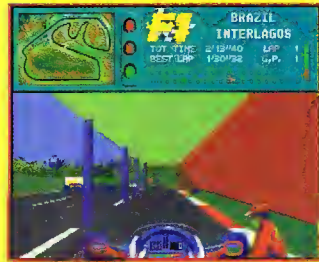
**WHY IT'S
GOING TO BE
A WINNER**



DOMARK'S LATEST

TAKES POLE

POSITION



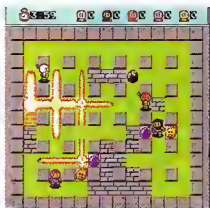
**REVIEWS... F1 • JAGUAR • CYBERMORPH • SPACE
CRUSADE • SPEEDBALL 2**

**ALSO... GENESIA PREVIEWED • COMPLETE GUIDE TO ROBOCOD • A
LOOK AT THE LATEST MANGA VIDEOS • A REVIEW OF LAST
YEAR'S HIT GAMES**

ST ACTION review 93 LEAGUE

Jonathan Maddock takes a brief a look at STA's favourite games of 1993

Dynablaster



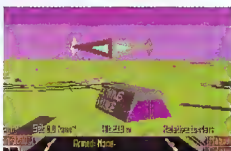
You may think I'm mad by not putting Elite II at the top spot, but way back in April a game came from France that is the most explosive piece of software you're ever likely to play, literally. Simple format and a simple idea.

You play the part of a bomber against another four opponents, and must make your way through a maze

chucking bombs trying to destroy your adversaries and become the last bomber standing. See, it sounds completely rubbish, but that statement couldn't be further from the truth. Thanks to the five-player adaptor you can bring a whole new meaning to staying in at home. Invite a few chums around, bring some finnies and settle down to the most fun you're ever likely to have playing a computer game.

Dynablaster may not look as impressive graphically as other games, but it beats the crop out of everything else for sheer playability, addiction and more importantly enjoyment. The game received a massive 94 per cent, a Gamer Gold and is an absolute classic.

Elite II



The sequel to the world's biggest and best computer game in the whole wide world ever. You'd think that the original couldn't be better, well how wrong

you'd be if you thought that.

The games creator, David Braben, had really gone to town and created a piece of software that contains the universe, well most of it anyway.

You can fly past 200 billion stars and land on anyone of the 30,000 inhabited planets in the game. In the origi-

nal there were only a handful of missions, but the sequel has literally thousands with over 70 different types. As soon as you take off your destiny is placed in your own hands - where you go and what you do is entirely up to you.

Visually Elite II contains some of the highest detailed polygons and vectors you're ever likely to see on an ST. From space stations to whole cities, it's all there in beautiful light-sourced, technicoloured detail.

For some people Elite became a way of life and slowly over the years the Elite junkies have given up their habit, but thanks to David Braben and his superb sequel they were able to get addicted all over again. Elite II is unmissable and you will love it.

Zool

Well it was about time. After every computer and console got their version of the world's greatest platformer a year ago, it eventually came to pass that Gremlin's biggest selling piece of software finally made it onto the ST.

The ninja from the nth dimension must jump, bounce and prance around six worlds of fast, frenetic platform fun. Each world has a theme and they range from Sweet world to the

final setting in Funfair world. The speed of the game was very impressive, as was the abundance of bright colours.

Zool may look cutesy and suitable for kids, but adults out there won't find a tougher platformer than Gremlin's effort. On his travels Zool faces all manner of bizarre beasts including the huge end of level baddies. The action platform game of the year and nothing else could touch it with a barge pole!



Lemmings 2

These fiendish green-haired suicidal Lemmings returned in 1993 and this time they're more suicidal than ever before! There is actually a plot this time around!

A magic talisman had been broken into 12 parts and spread throughout Lemsville. There are 12 tribes of lemmings, each inhabiting their own piece of lemming island. Every tribe needs to complete ten levels, upon which they are rewarded a piece of the magic talisman.

If you liked the animation in the first game then you're full head over heels in love with the sequel. The animators

have gone to town and created dozens of new comical situations. In the original, each lemming had eight different attributes, but technology has moved on and the green-haired ones are blessed with a further 46 abilities.

Lemmings 2 is twice as good and twice as fun as the original and is worthy of a place in everyone's software collection. Psychognosis have created yet another classic.

Chaos Engine

As a rule there's no-one better for producing high-class, top-quality computer games than the Bitmap Brothers and this two-player shoot-'em-up was no exception to the rule. The two players (either

o chum or the computer) must battle through four worlds of hot shooting action.

You had to choose between six mercenaries from all walks of life including a preacher, a novice, a gentleman and a thug. Each has its own different attributes and special powers.

The graphics are absolutely flawless and you can tell

that it is a Bitmap Brothers product just by glancing at the screen.

As with most Bitmap games there is an awesome soundtrack to boot with a smattering of sound effects. Addictive and as playable as hell itself, the Chaos Engine is one of the classiest products that your money can buy. Stylish, cool and a totally excellent shoot-'em-up.

Ishar 2

The sequel to the all-conquering, critically acclaimed RPG adventure from Siltmoris was like a breath of fresh air to ST gamers this year. After being disappoint-

ed by inadequate adventures, Ishar 2 came on the scene and kicked ass.

Strapping on your sword and clutching your spell book, you must head for a set of islands with an all-new team of heroes as you try to defeat the evil Kragh and his citadel of evil. Ishar 2 is a must-buy and should be at the top of

every gamer's shopping list. The graphics are luscious and put most other adventures in the shade. Some of the later levels are a sight to behold. The music is quite atmospheric and there is no way I could fault the game on the playability and addiction fronts. Despite being a very old and tired format Ishar 2 shone like a bright star in the darkened sky.

Graham Gooch's World Class Cricket



Possibly the best non-football sports simulation I've seen in a long time. Cricket as, to some people, isn't that exciting, but Audiogenic have produced a highly enjoyable piece of software that will appeal to cricket and non-cricket fans alike. One of the main

plus points of Gooch's World Class Cricket is the fact that it is so easy to play. In the past cricket games have only appealed to fanatics of the sport and this factor unfortunately made them highly unplayable and very tedious.

The graphics are excellent and well presented and even the sound, a Caribbean calypso kinda tune, is quite good. There is plenty of joystick waggling going on and this system of control makes batting and bowling very easy to do. Incredibly addictive, highly playable and well presented, Graham Gooch's is the ultimate cricket game.

Championship Manager '93

It was as a bit sparse on the football game front last year what with Goal arriving in 94 and Sensible capturing the hearts of ST gamers in 1992. No decent arcade soccer games, but one management simulation shone out from the rest of the pack and this was Domark's Championship Manager '93.

Interlek's creation beat the pants off everything else for realism and accuracy. Graphics and sound weren't

its strongest points, but it was just about as close as you're going to get to become a football league manager, unless you're one already!

Everything you think should be in a management game is in Championship Manager '93. Internationals, transfers, scouts, penalties, actual English and foreign player names are all in there which will please dedicated football fans and hopefully other games players as well!

Sleepwalker

Ocean do a lot of work for charadee, but they don't like to talk about it, instead they produce a brain-bashing platform adventure. Comic Relief returned to ask for some money for the needy and loads of you happy punters ran out to buy Sleepwalker.

Giving cash to those less fortunate than yourselves plus you got one hell of a platform game chucked in for good measure.

The game featured the talents of Lenny Henry, who was the voice behind the star of the game, Ralph

the dog. His master Lee is a Sleepwalker and as man's best friend it's Ralph's duty to stop Lee from being zapped, bashed, clobbered, pummeled and squashed while he walks around with his eyes closed.

Sleepwalker is packed full of brilliant cartoon-style graphics, plays like an absolute demon and is so addictive that you won't be able to put your joystick down. A truly great platformer packed full of puzzles and action, plus you'll be doing you're bit for charadee.

The Secret of Monkey Island

Undoubtedly the bargain game of the year and the most magnificent budget that you're ever likely to clomp your mitts on. Thanks to US Gold's Kixx XL budget label you got the world's best adventure for a measly price of £16.99.

The adventure of Guybrush Threepwood is presented in loving technical colour, contains a unique sense of humour and is so playable you won't want to put it down

until you've completed it.

I suppose there aren't a lot of people out there who haven't got the game, but for those unfortunates who missed out first time there hasn't been a better opportunity to splash your cash on a piece of software.

Monkey Island received a humungous 94 per cent, one of the highest scores of the year, and a morale boosting gold award as well.

OVER THE PAGE

Fasten your seatbelts, extinguish all cigarettes and get ready to take off when you see what beautiful pages we've got for you this month...

Feature: On the prowl.....62

Simon Clays gives you the law-down on

Atari's amazing 64-bit super console

Review: Cybermorph.....62

It comes bundled with the Jaguar. The world's first 64-bit game has arrived and Siman can't stop draoling

Talkback.....66

More scribbings and opinions from you the reader, plus the life-affecting Poor Camer

Budget Action: Speedball 2.....67

Via US Gold's Kixx budget label, the Bitmap

Brother's classic death sports game returns to the ST

Preview: Genesis.....68

Better than Populous? More exciting than Sim City? Genesis is coming in 1994 and it could become the God-game on the ST!

Review: F1.....70

Skid around the corner, da a quick pit stop, accelerate down the straight and take a swift look at Domark's F1

Feature: Manga.....74

The latest batch of Japanese videos reviewed for your enjoyment. Bleary-eyed and popcorn clutching Janathan checks them out

Feature: A new breed.....76

Want to know all about the Jaguar? Phil "Speed" Marse interviews two leading software developers who have had their hands on Atari's super console

Cheat Mode: Robocod.....80

A full set of hints and tips to the first five levels of Millennium's classic platformer

OK, so the Amiga out-gunned the ST in many departments and really did kick its printer port right up the rump. But what the Japanese marketing machine did to the Lynx was nigh-on murderous.

It was a far superior machine to the Sega Game Gear in every department, but lacked the support of high power advertising and fell like a lamb to the slaughter:

However, what the majority of us thought could hardly occur might actually become reality. As far as its technical merits are concerned, Jogaor autguns practically everything on the planet.

Add the Jagur's highly favourable price point and it seems that Atari have on an enviable combination. But, as we've all learned since the evaluation of the console, it takes more than an impressive set of chips to make a console a world beater.

There are a great many aesthetic factors to be taken into consideration, some of which may seem a little far-fetched to the layman, but which are of prime importance in the evolution of a machine.

Indeed, corporations invest phenomenal amounts of money to research the correct recipe for things as far removed as colour. What's even more surprising is that with this level of market research and investment, companies still manage to release machines that don't have the level of appeal needed to make them winners. One only has to look

On the prowl

Stealthily sneaking up on Sega and Nintendo, Atari's new Jaguar console looks set to take a giant leap into the limelight. Simon Clays takes a look

at Commodore's latest 32-bit CD-driven machine, to realise that despite its relatively advanced technology, something stinks when you pick it up and attempt to use it. Unfortunately, something so benign can actually make or



Behold, after what seems like an eternity in the waiting, it's finally here. Get ready for the first exclusive look at the game that comes bundled with the Jaguar pack, Cybermorph

er what seems like an
the waiting,

CYBERMORPH

**ACTION
GOLD**



Cripes! Driving at right without lights, very naughty

At last my dear Atari owners, after what seems like a lifetime in the wilderness spent wandering around a relatively empty void while Amiga and PC owners soaked up the limelight, we're back. And, we're back with such a vengeance that even the mighty PC owners are going to be left quaking in their 486-sized boots.

I have to admit that until I saw what Jaguar is capable of, I too was highly sceptical. But it really is ridiculously good for the money you're going to have to pay for it.

If the early software releases are a gauge of what things are going to be like, then we're going to see a revolution that sees Jaguar as the crown prince of the console empire.

When I first saw Cybermorph in its finished splendour I was literally gab-smacked. One goes from day to day in the computer software industry seeing a great deal of games some of which do make you sit up and think "that's rather nifty".

However, I've never been overcome in quite the manner I was when I saw Cybermorph. More than anything it deman-

[illegible]

Action FEATURE

break a product. However, I seriously believe that this time Atari have got it totally right in this department as well. The moment you even cast an eye on the packaging that Jaguar is caged in, you get a sense of something special and powerful.

The machine itself is a sleek, black animal, using a clever combination of high-tech space age technology and a softly moulded look that is popular in car interiors.

Although it's compact in size and height, Jaguar feels heavy and sturdy when you handle it. This strength leaves you with a feeling of security, and a sense that if you were to drop your precious machine it might possibly survive the blow.

Cartridges are inserted to the top of the machine and sit rather snugly next to a rounded undulation which will seat the CD drive when it's released later this year.

Forward of the CD housing is the power switch and a rather handy indicator light, which both speak for themselves.

Perhaps the most important part of any console is the feel and user friendliness of the control system. Atari have plumped for

the increasingly popular joypad.

Those of us who have always steered clear of the Japanese consoles invariably find these alienating on first use, and struggle to ever find harmony with them.

When Jaguar first emerged,

though, because the Jag-pad feels far superior to any of the aforementioned.

The most impressive thing I noticed was its cleverly crafted shape which feels completely ergonomic, and doesn't leave you with cramped up hands like so many

17 buttons and a four-way directional pad, which will render Atari's machine capable of the most complex of flight sims and adventure games.

In terms of layout, the Jaguar has a 12-button keypad reminiscent of the way a telephone is displayed, with the clever facility to slot in an overlay for keypad recognition.

Above the keypad sits the four-way directional controller, the pause and option buttons and A, B and C buttons. The amazing thing I found when playing was that although it sounds a hellishly dextrous feat, the Jag-pad is remarkably easy to use.

Using two hands the pad is easily accessible to all your fingers and thumbs, remaining incredibly comfortable without causing any stress or cramp - although it remains to be seen how a small child might cope.

Overall what we have in Jaguar is incredibly exciting. It looks better than any of its counterparts, it feels more durable than them, it's more practical and natural to use than them and most importantly the hardware and software potentially kick Commodore, Sega, Nintendo, Philips and 3DO into the gutter. Nice one Atari, I think eight out of ten owners are going to prefer this cat.



same criticism was made of the look of its joypad. However, having spent some time using this system I would beg to differ.

The pad is quite large in comparison to the CD32, Nintendo and Sega control pads. This shouldn't be seen as anything bad

of Jaguar's inferior counterparts. It also feels more solidly built than the other joypads and is less likely to break when it's inevitably dropped on a surface.

On the button front, Jaguar is more than adequately catered for. It boasts a total of

strated the sheer power of the machine and its immediate superiority to anything else you'll see.

I really could enthuse over the power and future of the Jaguar for all the space I'm allowed, but I can't so we'll move on to the plot of Cybermarph.

Far off in the future a galactic war has broken out. Both sides are technologically equal thanks to robotic assistance. However, the evil Empire has captured the majority of your weaponry, supplies and information and has them locked securely in pads throughout various planetary systems.

UNIQUE FIGHTER

Even some of your top designers have been placed in cryogenic suspension and encased in the aforementioned pads. Fortunately, your forces have a secret weapon tucked neatly up their neaprene sleeves. The Cybermarph Transmagriffin or T-Griffin is a unique prototype attack fighter.

As the name suggests, the T-Griffin is capable of morphing itself into various shapes to render it more aerodynamic or better protected from enemy fire.

Though restricted to planetary atmospheres, it is capable of hugging terrain at incredibly high speed and can also hover and fly backwards. This sounds remarkably like a helicopter, but rest assured it's a whole lot more.

I mean, how many choppers do you know that can take a severe battering and then regenerate the damaged parts? Or have an onboard holographic agent to keep you up to date with battle data, enemy locations and planetary activity? Not many I'll bet...

Sa, with all this hi-tech equipment, your

simple task is to collect these vital pads from the surface of planets, thus revitalising the beleaguered resistance forces.

Having collected the necessary number of pads from the planet surface Skylar (the hologram) activates the retrieval code and opens a beam portal which transports you to

the next sector. I've read with some interest various comparisons and references to Cybermarph being a 3D defender-type game.

In some respects I understand why this comparison has been made, because in its simplest essence Cybermarph is that way

inclined, but I must stress it looks nothing like a Defender clone and has substantially more about it.

The game totals a massive 50 levels and is divided into what are best described as systems. In each system you must clear five

At a monitor near you...



1. Score

2. Number of ships

3. Skylar

4. Crosshair

5. Speed

6. Shield meter

7. Twin shot, three-way, cruise bomb, mine and incinerator

8. Message window

9. Super weapon

10. Pod counter

11. Altimeter

12. Scanner

JAGUAR GAME REVIEW



That bald bird at the top's a dead ringer for Sinead O'Connor

➤ planets, find one secret world, access another through a bonus ring and tackle a world which contains an end-of-level guardian.

If you are successful in freeing a system then the resistance has a stronghold on which to base itself and you are able to move on to the next set of zones.

To really gauge the vastness of Cybermorph, it's best to examine the graphical worlds which go to make up the play area. Each planet is rendered in glorious technicoloured 3D fractals and features an effect known as garoud shading.

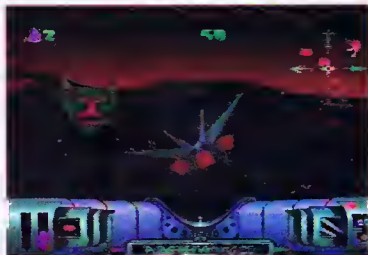
What this does is sits an artificial sun in the sky and shades all areas which are not

in direct sunlight to varying degrees. The overall effect is amazing and has to be seen to be believed. It brings a whole new level of realism to the landscape and brings a refreshing breath of fresh air into the 3D genre as you've seen it before.

What's also amazing is the pace at which the T-Griffin speeds across this complicated alien environment, it looks and feels truly magnificent as you swoop around the side of a fractal mountainside.

Unfortunately you can't spend all day gazing at the scenery and there's a job to do. However, the aim of your mission is disrupted as much as possible by the many different types of Empire craft that inhabit the

It's a funny old game - one minute driving along minding my own business, next second I'm attacked by a massive Demon's head



planets. These do their utmost to destroy both the T-Griffin and the pods you are trying to rescue. Some alien craft transport the pods to special areas such as a goods vehicle would.

These special areas are close by to Vortex towers, which emit a pollutant causing mass genocide of your pods by infecting them.

There are a vast array of enemies to pit your wits against. There are Kamikaze craft which throw themselves at your ship in the hope of damaging it and Pirates which fire missiles and then flee.

You also get crabs which bury themselves in the ground and then pop up, worms which camouflage themselves as the terrain and biospheres which cling to the ship and drain your energy.

Worst of all are the infamous level guardians like the Headhunter which apart from being intelligent can sink into the ground and re-emerge on the other side of you and attack.

PUZZLE

This really is the tip of the iceberg though, as there are at about 30 different aliens to defeat. As if that wasn't enough there are also Needles which thrust themselves out of the ground in an attempt to bring you down, prisons which ensnare your pods and forcefields which stop you entering various areas.

This is the puzzle aspect to Cybermorph as you must find the power supply to these systems and destroy them to proceed further.

Inside the T-Griffin there's a whole host of goodies awaiting your grubby mitts. For one, you have the ever helpful Skylar who operates a host of portals and equipment and generally gives you encouragement by way of some beautifully sampled speech.

You also have a rather nifty scanner which directs you to the pods, exits and also tells you where the nasties are hanging out. The display also features everything else you'd expect of a quality spacecraft like speed, optional targeting crosshair, altitude and many more.

What you're itching for me to tell you about though is the impressive array of fire-power available to you. You start with a fairly mundane single shot and most of the others are generated through having collected the pods that litter the planet surface, rather like power-ups.

There really are some pretty awesome weapons of destruction available to you. These can either build up your present weapon giving it rapid fire or double shot, or you are given extra weapons.

For example, the Incinerator shoots a deadly ball of flame, whereas Cruise Bombs hug the terrain before wrecking havoc on their target.

If that wasn't enough, Cybermorph also features three super weapons: Thunderquakers which act like a smart bomb, Detonators which destroy all buildings in a vicinity and nitros which grant you a moments increase in speed and a high intensity shield for protection.

Cybermorph not only looks beautiful, it really plays superbly as well. The control through the joystick is a treat to use and doesn't take to get used to.

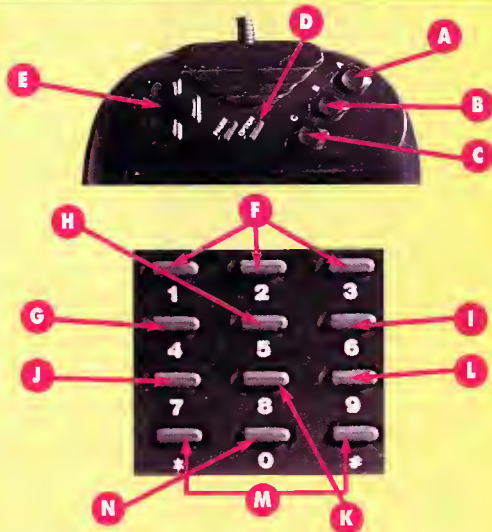
WAY AHEAD

Play is varied enough to keep you coming back for more, a taste of success will have you addicted in no time at all. I only wish there was more space for me to write more because I've not spoken about the fact that you can reconfigure the controls to suit yourself or the external views which make it possible to see the T-Griffin morph as it speeds up and slows down.

Cybermorph is a superb title to launch Jaguar with, it outstrips any other console package by light years. It looks great, sounds great and plays exceedingly well. Well done to ADT who've done a great job and roll on Battlemorph, the sequel.

SIMON CLAYS

You're in full control



A. Forward thrust
B. Fire weapon
C. Brake/backward thrust
D. Toggle main weapon ordinance

E. T-Griffin control
F. Super weapons
G. Toggle crosshairs
H. Forward view
I. Cockpit view
J. Left view

K. Rear view
L. Right view
M. Game reset
N. Music toggle

VISION

★★★★★★★★

AUDIO

★★★★★★★★

DIFFICULTY

★★★★★★★★

LASTABILITY

★★★★★★★★

Being the first Jaguar title it's very difficult to mark Cybermorph against anything but other platforms, and so immediately outguns everything we normally review within these pages. Super slick 3D and engrossing play make Morph an absolute treat.

95%

Publisher ➤ Atari
Developer ➤ ADT
Price ➤ Bundled in Jaguar package

Eagle Software



CREDIT CARD HOTLINE:

081 889 9172

ENQUIRY/ORDER LINE:

081 361 5730

24 HOUR FAX LINE

081 361 2733

118a Palmers Road
New Southgate
LONDON N11 1SL

BITMAP BROTHERS VOL 1 only £14.99 Xenon, Cadaver and Speedball II	DREAM TEAM only £16.99 Terminator II, Sim-punks, W.W.F.	RAYING MAD only £10.99 Mega Twins, Rodland, RoboRaid
NAPOLEONICS only £14.99 Waterloo, Borodino and Austerlitz	SOCCER MANIA only £9.99 Football Manager II, Gazza's Soccer, Football Manager - W.C. Ezzion, Microprose Soccer	POWER PACK II only £17.99 Princed II, Battle Master, Wings, It Came From The Desert
BIG BOX only £15.99 Captain Blood, Tie Tie on the Moon, Safari Game, Teenage Queen, Bubble Pops, Purple Saturn Days, Krypton Egg, Jump Jackson, Bobo, Hostages	TRIPLE PACK I (SPORTS) only £12.99 Microprose Soccer, Panza Kick Boxing and 3D Pool	BIG BOX II only £19.99 Back to the Future II, R-Type II, Real Ghostbusters, Dof of the Earth, TV Sports Football, Shanghai, Armalyte, Stribed, Bone Boozal
FLIGHT COMMAND only £14.99 Eliminator, Strike Force Harrier, Lancaster, Sky Fox and Sky Chase	4 WHEEL DRIVE only £18.99 Lotus Esprit, Celica GT4 Rally, Texas Suzuki, and Combi Racer	POWER PACK only £14.99 Xenon 2, TV Sports Football, Bloodchry and Lombard Rally
HOLLYWOOD COLLECTION only £14.99 RodeoCop, Ghostbusters 2, Indiana Jones, Batman the Movie	RAINBOW COLLECTION only £13.99 New Zealand Story, Bubble Bobble, Rainbow Islands	GRANDSTAND only £16.99 Gazza Soccer Score, Pro Tennis Tour, World Class Leaderboard and Continental Circus
MAX EXTRA only £17.99 Turrican II, ST Dragon, SWIV and Night Shift	NINJA COLLECTION only £10.99 D. Dragon, Shadow Warrior, D. Ninja	TRIPLE PACK II (ACTION) only £12.99 StreetFighter, Rick Dangerous II, Last Crusade Action
SUPER HEROES only £14.99 Strider II, Indiana Jones, Last Ninja II and Spy who loved me	AWARD WINNERS only £16.99 Kick Off II, Piggy Bank, Space Ace and Populous	2 HOT 2 HANDLE only £16.99 Golden Axe, Total Recall, Strike Warrior, Super Off Road Racing
STRATEGY MASTER only £21.99 Dunebox, Populous, Excalibur, Chessplayer 2160 and Spies of Excalibur	SUPER FIGHTER only £14.99 P.Fighter, W.W.F., Final Fight	THE GREATEST only £14.99 J.W. Whirlwind Snooker, Lure of the Temptress and Shuttle
DIZZYS EXCELLENT ADVENTURES only £14.99 Dizzy Panic, Gubble Dizzy, Dizzy Prince of York Folk, Spooon Dizzy and Knit and Snak	ACTION MASTERS only £9.99 Turbo Outrun, F15 Combat Pilot, Italy 1990, Wildlife and Double Dragon II	SPORTS COLLECTION only £9.99 Run the Gauntlet, Pro Tennis Tour and World Cup Soccer (Italy '90)
FOOTBALL CRAZY only £10.99 Kick Off II, Player Manager and K.O.B. Final White	QUEST AND GLORY only £16.99 Cadaver, Bloodchry, Iron Lord and Midwinter	ACTION 5 only £19.99 Rick Dangerous II, Ghostbusters II, Gunship, Super Ski and Hard Driving

TOP TITLES	ST	TOP TITLES	ST	TOP TITLES	ST	TOP TITLES	ST	TOP TITLES	ST
3D Construction Kit	£12.99	Dune *	£18.99	Legends of Valour	£25.99	Sim-punks	£6.99	Universal Monsters	£16.99
3D Construction Kit II	£36.99	Dune II *	£18.99	Lemmings	£15.99	Snowwalker (1 Meg) STE	£13.99	Utopia	£16.99
A320 Airbus Europe	£23.99	Dungeon / Chaos	£19.99	Lemmings and Data Disk	£18.99	Snow Bros.	£16.99	Utopia New World	£11.99
A320 Airbus USA	£23.99	Dynablast	£20.99	Lemmings II	£18.99	Soccer Kid	£16.99	Utopia II *	£16.99
Action Stations	£12.99	E.T. The Extra Terrestrial	£12.99	Lemmings - Data Disk	£18.99	Video Kid 1-999	£16.99	AD English 11-12	£18.99
Agony	£15.99	Evil's Mistress Dark	£21.99	Lemmings - Stand Alone	£8.99	Space Gun	£12.99	AD French 11-12	£18.99
Air Combat Patrol	£18.99	Evil II - Cerberus	£23.99	Liquid Kids *	£16.99	Space Crusade	£12.99	AD French 13-14	£18.99
Air Support	£15.99	Evil III	£19.99	Little Devil *	£17.99	Special Forces	£23.99	AD Maths 12-13	£18.99
Aliens II *	£16.99	F170 Tom Cat *	£16.99	Loom	£11.99	Steel Empire	£20.99	AD Maths 13-14	£18.99
A.M.I.C.E.N. Pool	£16.99	F17 Strike Eagle II	£12.99	Lost Patrol	£16.99	Strike Master	£22.99	AD Maths 14-15	£18.99
AMNIDS	£15.99	F174 Stealth Fighter *	£21.99	Lotus Turbo Challenge II	£8.99	Striker	£16.99	AD Maths 15-16	£18.99
Anknight Art of War in Skies	£23.99	F174 Stealth Fighter	£12.99	Lotus Turbo Challenge III	£16.99	Striker Fleet	£3.99	AD Maths 16-17	£18.99
Another World	£17.99	F20 Relator	£16.99	Lure of the Temptress	£16.99	Striker	£16.99	AD Maths 17-18	£18.99
Aquatic Games star J Pond	£18.99	F.A. Premier League Football	£16.99	Man Tank Platoon	£3.99	Soup Trek *	£16.99	AD Maths 18-19	£18.99
Arabian Nights *	£16.99	Fake Off - Top Kick	£23.99	MacDonald	£16.99	W.W.F. II	£16.99	AD Maths 19-20	£18.99
Armageddon	£15.99	Falcon	£8.99	Magic Pockets	£14.99	Super Space Invaders	£8.99	AD Maths 20-21	£18.99
Armageddon Upgrade *	£10.99	Falcon Mission Disk I	£6.99	Man Utd. Europe	£8.99	Super SWIV *	£16.99	AD Maths 21-22	£18.99
A.T. Train *	£23.99	Falcon Mission Disk II	£6.99	M. Mike's Ultimate Football *	£16.99	The Games 92 Espana	£20.99	AD Maths 22-23	£18.99
A.W.I.C. II	£17.99	Falcon 3.0 *	£23.99	Mega Fortress	£19.99	Their Finest Hour	£19.99	AD Maths 23-24	£18.99
Awesoma	£3.99	Fantastic Voyage	£16.99	Mesa Sports	£16.99	The Manager	£20.99	AD Maths 24-25	£18.99
B17 Flying Fortress	£23.99	Fate of Atlantis (Arc)	£16.99	Megatraveller II	£20.99	Thunderhawk/AT-73M	£19.99	AD Maths 25-26	£18.99
Barbarian II (Payg)	£8.99	Final Blow	£16.99	Merchant Colony	£16.99	Thunder Jaws	£16.99	AD Maths 26-27	£18.99
Bart vs The World *	£16.99	Final Fight	£7.99	Microprose Golf	£16.99	Tip On	£16.99	AD Maths 27-28	£18.99
B.A.T. II	£22.99	Fira and the	£15.99	Midwinter II	£12.99	Toonworld *	£16.99	AD Maths 28-29	£18.99
Battle of Britain	£16.99	First Samurai	£7.99	Nick Fiddes Golf *	£16.99	Trojan *	£16.99	AD Maths 29-30	£18.99
Battle Royale	£16.99	First Samurai/Megadolan	£20.99	Monkey Island	£15.99	Trojan II *	£16.99	AD Maths 30-31	£18.99
Battle Isle	£16.99	Flashback *	£16.99	Mr Nutz	£16.99	Trojan III *	£16.99	AD Maths 31-32	£18.99
Battle Toads	£16.99	Flight of the Intruder	£11.99	Nam 1965-75	£12.99	Twilight 2000 *	£23.99	AD Maths 32-33	£18.99
BC Kid	£16.99	Football Manager III *	£16.99	Nam 1965-75	£12.99	Ultimate V *	£16.99	AD Maths 33-34	£18.99
Bucky Bikes	£16.99	Future Wars	£8.99	Nick Fiddes Golf *	£16.99	Ultimate VI *	£16.99	AD Maths 34-35	£18.99
Butt Busters	£16.99	Gunship III	£12.99	Operation Stealth	£8.99	Ultimate VII *	£16.99	AD Maths 35-36	£18.99
Burn Up *	£16.99	Gyetsburg	£15.99	D. Sheriff Bridge	£20.99	Ultimate VIII *	£16.99	AD Maths 36-37	£18.99
Carnier	£16.99	Global Effect	£16.99	DRITUS	£10.99	Ultimate IX *	£16.99	AD Maths 37-38	£18.99
Cadaver - the pay off	£16.99	Global Gladiators	£16.99	Dr *	£10.99	Ultimate X *	£16.99	AD Maths 38-39	£18.99
California Games II	£7.99	Goldilocks	£16.99	Dr *	£10.99	Ultimate XI *	£16.99	AD Maths 39-40	£18.99
Campaign	£22.99	Gods	£14.99	Pacific Islands - T.Yankee II	£20.99	Ultimate XII *	£16.99	AD Maths 40-41	£18.99
Campaign Mission	£10.99	Golden Shot	£16.99	Pacific Islands Mission Disc	£14.99	Ultimate XIII *	£16.99	AD Maths 41-42	£18.99
Campaign II *	£23.99	G. Gooch Cricket (1 Meg)	£18.99	Pacific Islands II *	£16.99	Ultimate XIV *	£16.99	AD Maths 42-43	£18.99
Captive	£12.99	Graham Taylor	£15.99	Pearl Harbor	£3.99	Ultimate XV *	£16.99	AD Maths 43-44	£18.99
Carl's Lewis Challenge	£15.99	Grand Prix (Formula)	£16.99	Plan 9 From Outer Space	£3.99	Ultimate XVI *	£16.99	AD Maths 44-45	£18.99
Casles	£16.99	Gunsheep 2000	£23.99	Populous + Promised Lands	£3.99	Ultimate XVII *	£16.99	AD Maths 45-46	£18.99
Casles Data Disc	£11.99	Guy Spy	£17.99	Populous II (1 Meg)	£20.99	Ultimate XVIII *	£16.99	AD Maths 46-47	£18.99
Championship Manager	£20.99	Hard Nova	£7.99	Populous II (Half Meg)	£20.99	Ultimate XIX *	£16.99	AD Maths 47-48	£18.99
Championship Manager '93	£20.99	Harlequin	£14.99	Populous III	£20.99	Ultimate XX *	£16.99	AD Maths 48-49	£18.99
Chase Engine	£16.99	Harrier Assault AV9B	£23.99	Premier Manager II	£16.99	Ultimate XXI *	£16.99	AD Maths 49-50	£18.99
Chase GT4 Rally	£16.99	Haimdall	£16.99	Pro Flight	£30.99	Ultimate XXII *	£16.99	AD Maths 50-51	£18.99
Chase Rock II *	£14.99	Hero's Quest (Gren)	£8.99	Push Over	£8.99	Ultimate XXIII *	£16.99	AD Maths 51-52	£18.99
Civilization	£20.99	Hill Street Blues	£8.99	Puffy	£16.99	Ultimate XXIV *	£16.99	AD Maths 52-53	£18.99
C.O.Y. Air Com Bat	£20.99	Holdings 1914-18 *	£16.99	Rapscall	£16.99	Ultimate XXV *	£16.99	AD Maths 53-54	£18.99
Cool Croc Twins	£16.99	Hook	£8.99	Railroad Tycoon	£16.99	Ultimate XXVI *	£16.99	AD Maths 54-55	£18.99
Cool World	£16.99	I. Bothams Cricket	£19.99	Reach for the Skies	£16.99	Ultimate XXVII *	£16.99	AD Maths 55-56	£18.99
Combat Air Patrol	£16.99	International Dpn Golf	£16.99	Red Zone	£16.99	Ultimate XXVIII *	£16.99	AD Maths 56-57	£18.99
Combat Action	£16.99	International Sports Chalk	£15.99	Risky Woods	£16.99	Ultimate XXIX *	£16.99	AD Maths 57-58	£18.99
Cruise Cars II	£16.99	Ishtar - Legend Fortress	£20.99	Road Race Golf	£16.99	Ultimate XXX *	£16.99	AD Maths 58-59	£18.99
Cruise for a Corpse	£17.99	Jaguar XJ220	£16.99	Robin Hood	£16.99	Ultimate XXXI *	£16.99	AD Maths 59-60	£18.99
Crystal Kingdom Dizzy	£13.99	James Pond II (Op Starfish)	£16.99	Robocod	£7.99	Ultimate XXXII *	£16.99	AD Maths 60-61	£18.99
CyberSpace *	£23.99	J. White's Whirlwind	£19.99	Robocod II	£8.99	Ultimate XXXIII *	£16.99	AD Maths 61-62	£18.99
D-Day	£12.99	J. Barnes (1 Meg)	£15.99	Robo Land	£12.99	Ultimate XXXIV *	£16.99	AD Maths 62-63	£18.99
Dalek Attack	£12.99	Knight of the Sky 16 *	£20.99	Robo Land	£12.99	Ultimate XXXV *	£16.99	AD Maths 63-64	£18.99
Darkmere	£16.99	Kick Off II (1 Meg)	£16.99	R-Type II	£14.99	Ultimate XXXVI *	£16.99	AD Maths 64-65	£18.99
Deliverance	£16.99	Kid Gloves II	£10.99	Sabre Team	£16.99	Ultimate XXXVII *	£16.99	AD Maths 65-66	£18.99
DGeneration	£11.99	KILLING GAME SHOW	£15.99	Secret Wesp Luft *	£16.99	Ultimate XXXVIII *	£16.99	AD Maths 66-67	£18.99
Disciples of Steel	£16.99	Knightmare	£16.99	Sensitive Soccer 92-93	£16.99	Ultimate XXXIX *	£16.99	AD Maths 67-68	£18.99
Doodlebug	£16.99	Krug's S.F. Funhouse *	£16.99	Shadowlands	£16.99	Ultimate XL *	£16.99	AD Maths 68-69	£18.99
Double Dragon III	£16.99	Lawn Mower Man *	£16.99	SHADOW BEAST II	£8.99	Ultimate XLI *	£16.99	AD Maths 69-70	£18.99
Dreadnoughts	£22.99	Leadhead	£15.99	Shadow Worlds	£16.99	Ultimate XLII *	£16.99	AD Maths 70-71	£18.99
Dreadnoughts Blamark	£11.99	Leander	£15.99	Shoot at an Con. Kit	£7.99	Ultimate XLIII *	£16.99	AD Maths 71-72	£18.99
Dreadnoughts Ironclad	£11.99	Leeds Weapon	£16.99	Shuttle the Sin	£20.99	Ultimate XLIV *	£16.99	AD Maths 72-73	£18.99
Duck Takes Over for Gold	£15.99	Leeds II	£16.99	Silent Service II	£16.99	Ultimate XLV *	£16.99	AD Maths 73-74	£18.99
		Legend	£8.99	Slim Earth	£23.99	Ultimate XLVI *	£16.99	AD Maths 74-75	£18.99

TOP TITLES	ST	TOP TITLES	ST	TOP TITLES	ST	TOP TITLES	ST	TOP TITLES	ST
3D Pool	£6.99	Hunter Killer	£2.99	10x 3.5 DS	£5.99	20x 3.5 DS	£11.99	30x 3.5 DS	£21.99
Adams Family	£7.99	IK *	£6.99	100x 3.5 DS	£21.99	30x 3.5 DS	£21.99	100x 3.5 DS	£21.99
Aetherburn	£8.99	Impossible Mission II	£3.99	10x 3.5 DS	£5.99	20x 3.5 DS	£11.99	30x 3.5 DS	£21.99
Altered Beast	£8.99	Imperial Stormtrooper	£3.99	20x 3.5 DS	£11.99	30x 3.5 DS	£21.99	100x 3.5 DS	£21.99
Arkand II	£8.99	James Pond	£8.99	30x 3.5 DS	£21.99	100x 3.5 DS	£21.99		
ATMIND	£5.99	J.Khan Squash	£6.99	100x 3.5 DS	£21.99				
Barbarian	£5.99	Kid Gosh	£6.99						
Barbarian II	£8.99	Last Ninja II	£8.99						
Batman The Movie	£8.99	Last Ninja III	£7.99						
Battlehawks 1942	£8.99	Little Computer People	£2.99						
Blood Money	£6.99	Lombard RAC Rally	£3.99						
Bully's Sporting Darts	£7.99	Lotus Esprit	£3.99						
Cabal	£6.99	Mac Kick Moonster	£3.99						
California Games	£8.99	Midnight Resistance	£3.99						
Carrier Command	£8.99	Midwinter	£3.99						
Celica GT4 Rally	£8.99	Moonshine Racers	£3.99						
Centrefold Squares	£8.99	Mousse (Switchable)	£3.99						
Chess IQ	£8.99	Murder	£3.99						
Cloud Kingdom	£8.99	New Navy Seals	£3.99						
Colossus Chess	£8.99	New Zealand Story	£3.99						
Combo Bar	£8.99	North & South	£3.99						
Confidential Circus	£8.99	Out Run	£3.99						
Deluxe Strip Poker	£8.99	Operation Stealth	£3.99						
Double Dragon I or II	£8.99	Operation Thunderbolt	£3.99						
Dragon Ninja	£8.99	Operation Wolf	£3.99						
Duel	£8.99	Outrun Europa	£3.99						
Fantasy World WarZ	£8.99	Pang	£3.99						
Golden Axe	£8.99	Panza Kick Boxing	£3.99						
G.F.D.T.	£8.99	Panzer Magic	£3.99						
Ghostbusters II	£8.99	Pirates	£3.99						
Ghostbusters III	£8.99	Phlighter	£3.99						
Golden Axe	£8.99	Platoon	£3.99						
Golden Axe	£8.99	Plotting	£3.99						
Head over Heels	£8.99	Predator	£3.99						
H. H. Guide to Galaxy	£8.99	Predator II	£3.99						
Hudson Hawk	£8.99	Prince of Persia	£3.99						

	ST	TOP TITLES
	£6.99	Universal Monsters.
	£13.99	Utopia
Meg) STE	£16.99	Utopia New World
	£16.99	Utopia II *
	£16.99	Video Kid
	£16.99	Viking Fleet of Conquest
	£16.99	Volted
	£23.99	Vroom
	£20.99	Walker
	£22.99	War in the Gulf
ill	£17.99	War Zone (Coca Design)
	£16.99	White Heat (Meg)
	£16.99	Wid Wheels
	£16.99	Wiz Kid
n	£16.99	W.W.F.
raders	£20.99	W.W.F. II
	£23.99	Zoo!
Escape	£19.99	
OUR	£20.99	
	£19.99	
U-73M	£16.99	
	£16.99	
	£16.99	
	£16.99	
	£16.99	
	£16.99	
	£23.99	
	£16.99	
	£20.99	
	£23.99	
3.5 DS disc		
with Labels boxed in		
	£16.99	10x 3.5 DS DD
	£16.99	20x 3.5 DS DD
	£16.99	30x 3.5 DS DD
	£16.99	50x 3.5 DS DD
	£16.99	100x 3.5 DS DD
	£16.99	
	£16.99	Please add 50p per 10 discs
	£16.99	ordering to cover P & D
	£20.99	Also available:
	£23.99	DS HD disks please phone
		prices
BUDGET TITLES UNDER £10		
	£6.99	Hunter Killer
ry	£7.99	IK
	£6.99	Indy Last Crusade Graphic
	£6.99	Indy Last Crusade Graphic
	£6.99	J.Khan Squeash
	£5.99	Kid Gloves
	£5.99	Lost Ninja II
Movie	£6.99	Last Ninja III
942	£6.99	Little Computer People
	£6.99	Lombard RAC Rally
ing Darfs	£7.99	Lotus Esprit
	£6.99	M.Jackson Moonwalker
and	£6.99	Midnight Resistance
atures	£6.99	Midwinter
	£6.99	Moonshine Racers
	£6.99	Murder (Switchable)
ss	£6.99	Navy Seals
	£6.99	New Zealand Story
icus	£6.99	North & South
icker	£6.99	Out Run
in for II	£6.99	Operation Thunderbolt
Dirty	£6.99	Operation Wolf
	£6.99	Operation Wolf
	£6.99	Panther II
ll	£6.99	Panther II
ts	£6.99	Pangloss
	£6.99	Pangloss
Gateway	£6.99	Panther Magic
	£6.99	Pirates
	£6.99	Pitfighter
	£6.99	Platoon
	£6.99	Plotting
	£6.99	Predate
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II
	£6.99	Predate II

Welcome to the page which is to taste and intellect what Bobby Davro is to comedy and music. Dave Cusick is your host...

Mail order crooks?

About three months ago I sent away for Zool for my 1040STE from a mail order company.

I'd seen their advert in another ST magazine for several months and I thought they must be reasonably reliable, so I gave my dad the money and he wrote out a cheque

for me and I sent it off.

About two weeks later the cheque was cashed, but so far I've still seen nothing of Zool. About a month after I ordered it I wrote again to the company, but they didn't reply.

They didn't give a telephone number in the advert so I haven't been able to ring up and pester them about it. What should I do?

They've got my money, which takes ages to save up, and I've not got my game yet.

Graeme West, Aberdeen

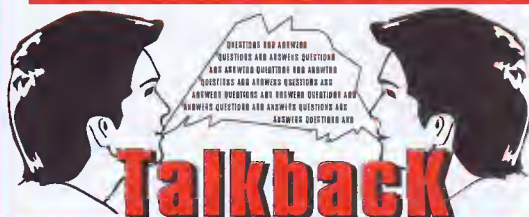
In situations like this it's very difficult to know what to do. Since they've cashed your cheque they should indeed have sent the game and since they haven't they are breaking the law.

Try writing again and if you don't hear anything back within a week or two, I would try contacting the local trading standards office to see if they can help.

There's a lesson to be learned from this story. Always try and use companies that friends have found reliable or that you've used yourself in the past.

You don't say which magazine

If you've something to say, put pen to paper and write to the Techmeister himself...



Send your post to: Mr Talkback, ST Action, Europa House, Adlington Park, Macclesfield SK10 4NP

you saw the advert in; you should always make sure that the magazine has a policy of not allowing adverts from just any old company.

For extra help and advice turn to the special Mail Ordering feature in this issue.

How do we do it?

First of all, well done to everybody involved in STA. I like the new writers and style and I'd just like to say keep up the good work.

The other thing I was meaning to ask is about how you actually put the magazine together. Do you write all the reviews on an ST? And how do you get the pictures of the games as well?

Daniel Roberts, Manchester

We're all so chuffed with your

compliments, Daniel, that we shall indeed enlighten you as to the intricacies of our production process. Obviously we play the games on an ST, but we have to write the reviews and lay out the pages on an Apple Macintosh computer because these are the industry standard machines.

We "grab" the screen pictures using a hardware device which connects the ST to the Mac. When we flick a switch on this device and press a key on the Mac the picture which is on the ST's screen is "grabbed" into memory and appears on the Mac's screen. This can then be saved and imparted into the publishing software on the Mac for incorporation in the layout of the pages.

Since freelance work is done at home, however, it is often written on the humble ST and saved in a format readable by the Mac publishing package.

Golden oldies



I've noticed something of a trend in the public domain recently. People are resurrecting old games, adding smarter graphics and so forth. In the last few months I've seen Galaxian (brilliant space invaders clone), Rayoid (great asteroids clone), Pacman and many more.

Quite frankly, I'm happy as Larry to see these classics given a new lease of life, especially since they only cost a couple of quid. I'm just waiting for a PD or shareware version of Frogger, because I had a version of it for my Acorn Electron which was brilliant and I'm sure my STE would make a great job of it. Maybe the blokes who came up with that lovely STE-only version of Pacman are listening?

R Felton, Derby

I agree, it is nice to see such classics doing the rounds again and reaching a whole new audience of younger gamers. It's surprising just how many good games have started appearing in the public domain, so you'd be well advised to monitor the PD pages carefully for the latest developments. Some of the games are better than commercial efforts, and they cost about a tenth of the price.

The Poor Corner

Disk Ditty

There's Sony disks and Agfa disks and Select disks and more besides
There's TDK and 3M disks
and even ones with double sides
There's cheapie disks and branded disks
and HD disks with holes both sides
And 5 inch disks and 3 inch disks
and 3.5 for ST drives
There's silver disks and orange disks
and bluey disks and black ones too
There's greyish disks and reddish disks
and yellow ones and green for you
There's floppy disks and hard drive
disks and optical types on sale too
But one thing that still baffles me
is why they break when I use them
glue

Ulrika Jenkins, London

Dodgy Salesperson Jobby

As I went wand'ring through the woods
I met a man selling shoddy goods
His table was filled with machines
Obtained from sources by dubious means
He grinned and winked and smiled at me
And asked a fiver for an Atari ST
I could not believe my eyes
I leapt with joy and some surprise
I dug down deep and found the dough
And raced off home, my friends to show
I wanted a disk into the slot
And all at once I was besott' ...ed.

Ray Stinson, Lancashire

Sad Ode to the ST

But she wasn't as pretty as that 3.5 drive
Rod Stewart sung of Sailing 'cross seas

But he ain't a patch on springy grey keys
Gollum asked about Bilbo's pockets
But he's not as cute as those Midi sockets
And as for those holes where jo sticks dock
Into those I thrust my Quickshot 2 Python.
Why, what what else would I stick in there?

Steven Crays, High Wycombe

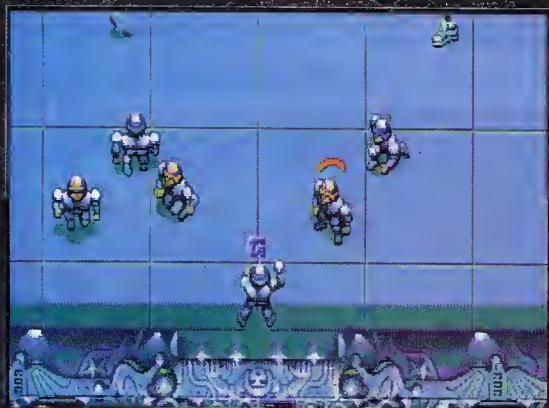
They really do get sadder each month, don't they? Ray and Ulrika's efforts were poor enough, but I can honestly say I don't think we've yet had a poem as dire as Steven's little ditty. If you think you can do better (and let's face it, it's not difficult), drop us a line here at STA towers.



"Champions,
Chomplans!"
Drunken revelry
with the boys

BUDGET ACTION

Take control of Brutal Deluxe, attempt to hit a metal ball into a goal and punch the living daylights out of your opponent — or be a right big girl's blouse!



Metal-plate head Grobbelaar makes a great save. Funky moustache not included

SPEEDBALL 2

Welcome to the year 2100, and Speedball 2 is back. Five years after being forced underground it returns, thanks to the creation of the Speedball Players' Association and the newly formed 16-team World Speedball League. But still it remains as violent as ever.

Your team, Brutal Deluxe, is stuck

at the bottom of the WSL's Division 2, but now you're in charge and it's your chance to make them great. Do you take up the challenge?

The object of the game is to score points by lobbing a metal ball into your opponent's goal by any means possible. This includes beating the pulp out of your rival if you see fit.

Simple huh? Well, this is not to mention all the bonuses you need to acquire, crucial to the outcome of the game, or that you need to build up your team with the many attributes available and create a strategy.

You can choose between

limit of six seconds. These can help you in a variety of ways. For example, Freeze Team will freeze opponents for a limited period, and Monic will increase both teams' attributes to a maximum. Armour and weaponry can also be picked up to increase individual player's attributes. A Chestplate will increase defensive ability, Bitmap Shades will enhance aggression, a Glove will increase power and so on.

Through the management side of Speedball 2 you can build up your squad of 12. Buying and selling your players while increasing their attributes can prove vital to your success.

The Gym screen will allow you to train individual players or the whole team. A player's attributes determine their individual strengths during a match and can be changed through this screen.

Players attributes are rated in eight ways. Aggression defines whether players will attack or avoid their opponent and Defence

determines how hard it is for someone to take the ball from you, for instance.

The moves are easy to master and the simple joystick controls make controlling your players easy. A certain amount of ohterouch can be applied to direct the ball in the direction you want.

The rapid gameplay makes for an exciting sports game. There is plenty to keep you amused for quite a while. If you manage to complete the League, there are always the cup matches - knockout tournaments consisting of four rounds played over two legs, and if all this gets too much you can always grab a friend and play a two-player match.

The futuristic theme is taken up in the attractive appearance of the game. The metallic-looking sports arena is clearly set out and so none of the action is missed.

The sound track is good and it's a shame that the music could not be continued throughout the game instead of rather sparse sound effects.

All in all though, it's a great game with plenty of action and the management side of having to develop a strategy and build your team adds variety.

TINA HACKETT



The Gym Screen, and there's not enough cash to buy those cool Bitmap shades. Aah, shame!

VISION	
★★★★★★★★	
AUDIO	
★★★★★★★★	
DIFFICULTY	
★★★★★★★★	
LASTABILITY	
★★★★★★★★	
Fast, furious, futuristic sports action, with a management strategy angle to it. Great stuff!	85%
Publisher > Kixx	
Developer > The Bitmap Brothers	
Disks > 1	
Price > \$9.99	
HD Install > N/A	
Size > 1/2 meg	

GENESIA

Populous and Civilization may have reigned for a long time now, but there's a new kid in town called Genesia and he's here to take the throne...

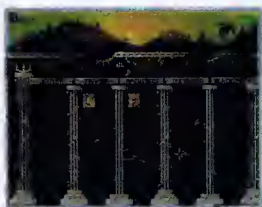
Over the years the God game has become more and more popular. There haven't been many of this type made simply because of the amount of programming and knowledge that it takes to produce the piece of software.

Populous 1 and 2, Powermonger, Civilization and Sim City have all been tremendous successes on the ST, but why has the genre become so popular? Well for starters you get to play God. What other reason do you need!

You rule a piece of land or even a whole world and get to control everything including



The map of world one and the land is there to be conquered, so get conquering!



Before your adventure gets underway you must select trades for all your inhabitants



Fire! Somebody call 999. Oh damn, telephones haven't been invented yet!

messing and enhancing people's lives. Does this mean that God is sitting somewhere at a ST with mouse in one hand and copy of Populous in the other?

Then again this means God must have created the people to make Populous and therefore is the life we're leading in fact just a small insignificant part of a very huge and complicated computer game? If God created

us then who created God and do we actually exist anyway and why am I losing track of what I was going on about?

Ah yes, why has this genre become so popular? Another reason could be that older players are getting into these super-intelligent God games. Kids leaving their computer on may well find out that Mum or Dad could be controlling whole worlds having given up on trying to control their kids.

This is due to the universal appeal of the God game. I personally don't know anyone who doesn't like Populous. They are very intelligent, strategy-based games, but this doesn't make them boring, they are perhaps more rewarding than other types of software.

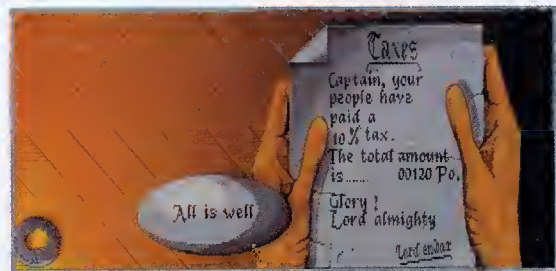
In most God products you get to control

people, you must combat natural and unnatural disasters and so the whole point of the software is to survive. The ability to say that you survived is a pretty awesome achievement.

One of my personal favourite God games is Sim City. This is due to the fact that you have a choice on how to play. You can build up your city and try to complete an objective or you can just sit down at your monitor screen and fiddle endlessly with your city at your own leisure.

These games all seem to transport you to another world where you can easily lose track of time plus you don't have a set time in which to complete the game. By saving your position you can come back to your world or city whenever you like. All in all each God game provides a welcome and relaxing break away from some of the monotonous platformers and shoot 'em-ups.

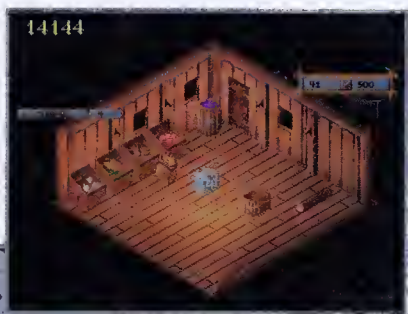
One of the nice and helpful balance sheets to keep you informed on how you are doing in your quest for the seven jewels



Yes even in computer games you have to pay your taxes. I'd blame the Tories and hey who wouldn't!



The work has begun on the land. Three houses are already built and the farmer has started on his field



The warehouse has been built and I can now store all my supplies there

played by the computer or by your human friends.

Once found, the jewels can also be subsequently lost, so your task is not as straightforward as it seems. You win by being the first to recover all the jewels or if you're the only player left standing.

Before the action starts you have to choose between five different worlds. Depending on the one you choose, the computer will apply a specific policy plus the game's configuration will be different and have its own strategy.

You begin the quest with four inhabitants. Each owns a house and must be given a trade. These range from farmers to inventors to blacksmiths. Every job to build a living populace is in there.

The choice of trade must be made wisely at first. For instance it's not worth choosing a carpenter if you haven't chosen a woodsman to cut down the trees. The inventors play a particularly crucial role in helping you fulfil your mission because they invent machines to help you win, but first you must build them a workshop. This means that you need a woodsman, a carpenter and an architect before you can even begin to think about achieving your final objective.

Buildings are important in the game, but useless if you don't keep the surrounding land in order. You must have good water



The second balance sheet which is similar to the first, but uses figures and words rather than the bar graphs

supplies, which means wells must be built. Fields must be sown to enable farmers to grow crops to feed your workforce and so it goes on.

The first aim is to build a small village, so that you can attract enough people to live there and then hopefully use them as your army, so that you can wander the land to find the jewels and defeat your opponents.

To lure people onto your land certain factors must exist. This next bit might sound like a Blue Peter cookery lesson, but you will need a vacant house, enough food and water, a morale rating over 5, no epidemics and

no battles should be in progress on your land.

Genesis has so many factors and decisions to be made that I could spend ages detailing them all, but lack of space prevents that. It is so in-depth that it will keep gamers entertained for a long time to come.

Genesis is based on a "turn" format. You must make all your decisions and then end your turn, so that your opponents can have

start, land will be scorched and water supplies will be low. In winter all outdoor activities such as farming, lumber and carpentry must automatically come to an end due to the harshness of the weather.

Genesis, although similar in style to Populous, has some nice little features. One of these is the balance sheet which provides all manner of information on how you are doing in your quest. Not highly original, but it's quite often these little touches that improve a game from being mediocre to excellent.

It seems to combine two elements of gameplay which have been previously featured in its competitors. The first is the ability to sit back and slowly build up your settlement from nothing while the second is the objective which must be achieved to complete your quest.

These two elements, combined with its amazing graphics could well see Genesis becoming one of the strategy/God games of 1994 and maybe even surpassing its predecessors.



Sleigh bells ring... are you listening! Snow falls over the land and the inhabitants have built some snowmen!

their ga. Each turn represents one of the four seasons (spring, summer, autumn and winter).

Not only does this allow for some quite brilliant graphics in the game it also casts up another range of options and decisions to consider. For instance in summer fires will

This menu allows you to build. I've decided to construct a warehouse





**At long last it's the green
The ideal opportunity to ta
on the mantle of Mr Mansell!
Just blame everybody for
everything, including
all own mistakes, and
generally suffer from
a strange accent...**

**On yer marks, get set,
oh, go on then wiggle
that joystick**

It's a strange old world isn't it? How many times punters, have you had déjà vu? I'd guess probably a few times, but not as many as yours truly, who sees replicas of the same game ideas repeated several times a week.

Oddly enough, the most common clone of all is the car racing game. After all if you make a bog-standard platformer, at least the character can look slightly different from the last you saw.

But in the racing circuit, there's only one definitive set of tracks, one set of cars with the

same markings and one set of named drivers.

As a rule, car races are the type of game I've always revelled in, but there does come a time when a genre becomes "tired" and the proverbial "exhaust" becomes exhausted.

This is not to say that there hasn't been a boot-load of classics along the way. You've only got to take a little look at the likes of Formula 1 Grand Prix or Vroom to appreciate what a dassy racing game's driving at.

Uncannily enough, the link here is that Domark's latest offering to the games world is programmed by none other than Lankhar,

the people behind Vroom.

I don't know how many of you remember Vroom, but let me tell you it was a classic. French software house Lankhar worked wonders and probably produced the fastest Formula 1 racing game ever for the ST.

Well, now they're back with their second offering with the full and unadulterated approval of the motor racing sports governing body, the FIA. What this means is that the game can feature all the official tracks, drivers, constructors and advertisers.

Someone please correct me, but bor the

odd name, everyone's used all of the above without the official recognition of their product, so I don't think it means that much. However, it's a nice touch I suppose, and will no doubt help F-1 to sell a tad more easily.

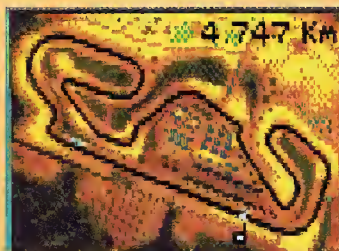
That said, the proof is in the pudding and it's the play and look that will determine the success of this release. So with this in mind let's don our overalls, walk gingerly over to

TRACKS OF MY TEARS



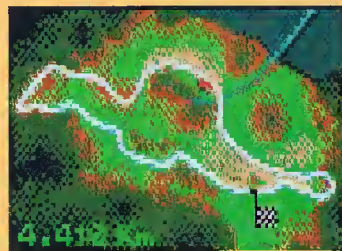
BRAZIL - Interlagos

A demanding but rewarding circuit with two top speed straights. Spend too long having tyre changes and you'll be surprised how quickly your opponents catch up



SPAIN - Barcelona

This is a really hard course with corners that appear to rush up on you from nowhere. An important track to keep your eye on the circuit map at the top of the screen



CANADA - Montreal

This Grand Prix will put a tremendous amount of pressure on both your tyres and brakes. Try to remember your braking points so you're not caught out by some of the slower corners



SAN MARINO - Imola

Here's a track that will have you driving to your limit. The course is very fast, but try to remember where the chicanes are as they'll require some hectic braking



MONACO - Monte Carlo

Probably the most famous circuit in the world. Raced on the streets, you'll find qualification as important as the race since overtaking is really tricky



FRANCE - Castellet

Situated between Toulon and Marseille, Castellet has one of the most spectacular chicane sections of any motor racing circuit, that has to be experienced to be believed

ght.
e



the pits and find out whether F-1 is a blow out on the first lap, or a model snagging, champagne-spurting winner.

Playwise everything begins in the Options menu, where you determine the type of race you want to run. You can decide to train on any of the 12 tracks that form the world championship, to familiarise yourself.

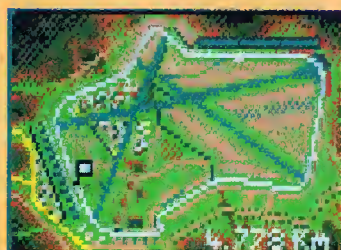
You can also select an arcade version of F-1 which puts you on the self same tracks, but asks you to overtake an increasingly larger number of cars to qualify for the next circuit. Last, but by no means least, is the full blown World Championship mode. This puts you up against all the top drivers vying for points over all the world's top circuits, or allows you to choose an individual track to compete on.

Success, as usual, means points for prizes, with a win giving you ten points towards the drivers' championship and the same number going to the constructors in their battle to be the best.

As usual in this style of title you can adjust the skill level to render it playable in the early stages and to give you some challenge once you've mastered the control and courses.

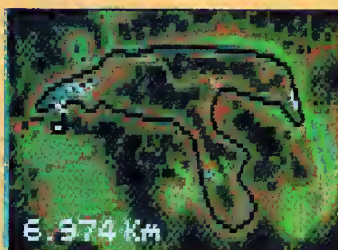
Skill levels can be adjusted between the indestructible cars that the novice drives, right through to the hyper-sensitive, lightning fast cars of the experts.

You also have the option to alter the wings of your hot rod, and much of this depends on the track on which you are competing. For example, setting your wings in a low position gives you less drag giving you a higher top speed, whereas a high setting operates in reverse and makes you stick glue. You also have the opportunity to



BRITAIN - Silverstone

Silverstone has been recently revised because it's just too fast. Now the circuit is one of the one of the most challenging around with fast sixth gear straights leading to tight second gear corners



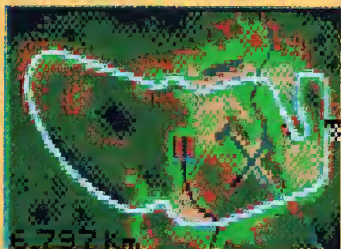
BELGIUM - Spa

A popular circuit for drivers due to the precision required to hit fast lap times. However, it does contain a particularly dangerous first bend as the cars rush away from the grid



PORTUGAL - Estoril

A circuit comprised of long sweeping bends. Overtaking isn't too difficult as long as you are prepared to leave the racing line and drive around the outside of other cars



GERMANY - Hockenheim

A dangerous forested circuit which is mainly made up of straights. Your car should be aligned to a low downforce setting, and don't forget to watch out for some pretty sharp bends



ITALY - Monza

The most incredible part of this track is the top gear Parabolica corner which leads onto the start-finish straight. Getting this corner correct and you will reach fantastic speeds



AUSTRALIA - Adelaide

A street circuit which may have you wishing you selected an auto gearbox. Setting the car is a difficult task on this course as it contains both long straights and extremely twisty sections



The two-player option gives you the chance to battle it out against a pal

older brother Vroom with a few alterations. This said, it's a quality product and runs extremely smoothly on the Atari. In fact, I'd go as far as to say that F-1 could become the definitive arcade racer on the ST.

SIMON CLAYS

Err, I'll have a packet of crisps, a box of matches and a paper, please

change your tyres, the gearbox and just about everything else conceivable. In fact, one of the only things you can't change is your underwear after you've careered into an ad hoarding.

Once you're on the grid you can elect to qualify or go straight into the actual race. Attempting to qualify is probably the best policy as you have a chance to improve your position on the starting grid, rather than the default position to the rear of the grid. After all the preparation work, it's finally time to test your skill and nerve in the race. Graphically, F-1 is very similar to its older brother Vroom, and has the same feel as it.

This is by no means a bad thing, as Vroom not only looked good, but moved at a tremendous rate of knots. If you'd like

proof of the speed of F-1, just select the Turbo mode and watch your car fly around the track.

If you have any trouble during the course of the race then you can enter the good old pit lane. Here you can get your mechanics to break into a sweat, changing your tyres or refuelling your sporty motor.

However, time being of the utmost importance in the hi-tech world of motor racing, you've no time to get yourself a nice munchy bar or glance at the over-priced tapes, it's straight back into the race.

Perhaps the best option of all is the two-player split screen game. This allows you to race against not only the other competitors, but also one of your mates.

To a large extent F-1 is very similar to its

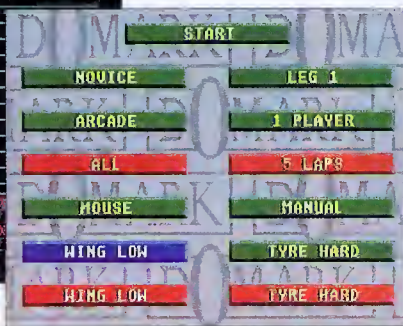


Well, at least you can't clamp my front wheel now

This is the options screen which is almost as interesting as that top Brummy whinge-bag Nigel Mansell

FORMULA 1 WORLD CHAMPIONSHIP							
DRIVERS	GP #1	GP #2	GP #3	GP #4	GP #5	GP #6	TOTAL
PROST							
HILL							
BERGER							
PATRESSE							
LATAPANA							
DE CRESSA							
SCHUMACHER							
MAKLEIN							
BRUNDELL							
ANDRETTI							
SAMADY							
HEBERT							
ALES							
BLUNDELL							
BRUNDELL							
BEST LAP	1'28'04	1'28'04	1'28'04	1'28'04	1'28'04	1'28'04	1'28'04
BEST GP	1'28'04	1'28'04	1'28'04	1'28'04	1'28'04	1'28'04	1'28'04

Here's the bit of paper that Murrey Walker reads from on a Sunday afternoon



VISION	
★★★★★★★★	
AUDIO	
★★★★★★★★	
DIFFICULTY	
★★★★★★★★	
LASTABILITY	
★★★★★★★★	
Nice graphics coupled up with brilliant play, make F-1 a must for all lovers of a quality arcade racing title	88%
Publisher > Domark	
Developer > Lankhor	
Disks > 1	
Price > \$25.99	
HD Install > No	
Size > 1 meg	

SEIKOSHA PRINTERS NEW! COLOUR

Silica are pleased to recommend the high quality range of Seikosha printers, built by a company that is used to manufacturing quality precision products. Seikosha are part of the massive Seiko/Epson group with a turnover of £6 billion and 18,000 staff. Every dot matrix printer from Silica comes with a free printer starter kit which includes all you need to get up and running with your new Seikosha printer (see below).

24-PIN £169

EXC VAT

FREE! FROM SILICA

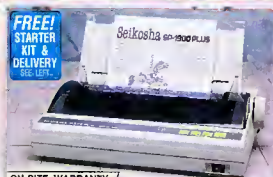
- DELIVERY** Next day - anywhere in the UK mainland.
- HELPLINE** Technical helpline during office hours.
- AMIGA DRIVER** Seikosha Plus Printer Driver with every SL-96. For extra high quality output. Features include:
 - Definite Dither Routines
 - Prints up to 255 Shades of Grey
 - 16 point Colour Adjustment
 - Enhanced Print Speeds
 - Ink Compensation Correction
 - Full Control of Printer Typesets
 - Workbench 2/3 GUI
 - Graphics/Paper Size, Margins
- STARTER KIT** With every Seikosha dot matrix printer



Every Seikosha dot matrix printer from Silica comes with a FREE Starter Kit, worth £29.38 (225-147).

- 3 1/2" Disk with Amiga & ST Printer Drivers
- 1.8 Metre Parallel Printer Cable
- 200 Sheets of Quality Continuous Paper
- 50 Continuous Tractor Feed Address Labels
- 50 Continuous Tractor Feed Disk Labels

9-PIN 80 COLUMN 192 CPS



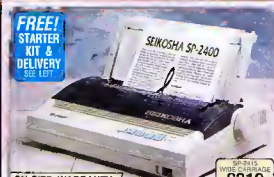
FREE! STARTER KIT & DELIVERY SEE LIST

ON-SITE WARRANTY 1 YR - ONLY £100 - POS B15

- Seikosha SP-1900 Plus
- 9-Pin Dot Matrix
- 80 Column
- 192cps Draft, 48cps NLQ
- 1K Printer Buffer + 2 Fonts
- Parallel Interface
- Graphics Resolution: 144 x 72dpi
- Epson and IBM Emulation (Windows compatible using Epson/HP drivers included as standard in Windows 3.1)
- Automatic Sheet Feeder Option
- Auto Paper Load, Paper Parking
- FREE Silica Printer Starter Kit

PRINTER RRP ... £149
STARTER KIT ... £25
TOTAL VALUE: £174
SAVING: £55
SILICA PRICE: £119
£109
+ VAT = £128.08 PBI B15

9-PIN 80 COLUMN 300 CPS



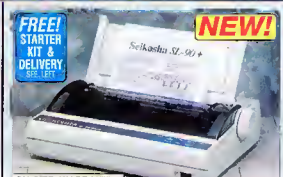
FREE! STARTER KIT & DELIVERY SEE LIST

ON-SITE WARRANTY 1 YR - ONLY £100 - POS B15

- Seikosha SP-2400
- 9-Pin Dot Matrix
- 80 Column
- 300cps SD, 240cps D, 60cps NLQ
- 21K Printer Buffer + 5 Fonts
- Parallel and Serial Interfaces
- Graphics Resolution: 240 x 144dpi
- Epson and IBM Emulation (Windows compatible using Epson/HP drivers included as standard in Windows 3.1)
- Optional Auto Sheet Feeder Unit
- FREE Silica Printer Starter Kit (Wide Carriage Model Available £2415 - £219 + VAT = £237.33 PBI B215)

PRINTER RRP ... £195
STARTER KIT ... £25
TOTAL VALUE: £220
SAVING: £71
SILICA PRICE: £139
£139
+ VAT = £163.33 PBI B204

24-PIN 80 COLUMN 240 CPS



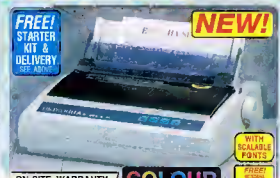
FREE! STARTER KIT & DELIVERY SEE LIST

ON-SITE WARRANTY 1 YR - ONLY £100 - POS B15

- Seikosha SL-90 Plus
- 24-Pin Dot Matrix
- 80 Column
- 240cps SD, 192cps D, 84cps LQ
- 20K Buffer + 9 Fonts
- Parallel Interface
- Graphics Resolution: 360 x 360dpi
- Epson LQ850 Emulation
- Windows Driver as Standard
- Semi-Automatic Sheet Feeder, Paper Parking, Optional Automatic CSF
- FREE Silica Printer Starter Kit

PRINTER RRP ... £198
STARTER KIT ... £25
TOTAL VALUE: £223
SAVING: £75
SILICA PRICE: £139
£139
+ VAT = £163.33 PBI B203

24-PIN COLOUR PRINTER



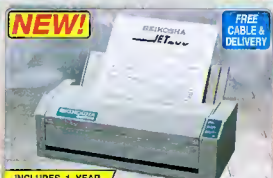
FREE! STARTER KIT & DELIVERY SEE LIST

ON-SITE WARRANTY 1 YR - ONLY £100 - POS B15

- Seikosha SL-96
- 24 pin - Dot Matrix
- 240cps SDraft, 84cps LO
- 42K Printer Buffer
- 2 Scalable Fonts + 8 Bitmap Fonts
- Parallel Interface
- Graphics Resolution: 360 x 360 dpi
- Epson LQ870 Emulation with Colour Function
- Colour Windows Driver as Standard
- Colour Printing as Standard (Includes Colour Ribbon - Black Ribbon Optional Extra)
- Friction Feed/Push Tractor
- Optional Automatic Cut Sheet Feeder
- FREE Silica Printer Starter Kit

PRINTER RRP ... £249
STARTER KIT ... £25
TOTAL VALUE: £274
SAVING: £105
SILICA PRICE: £169
£169
+ VAT = £198.58 PBI B311

180cps INKJET



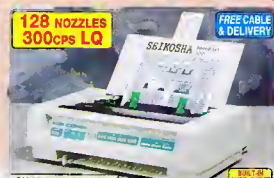
FREE! STARTER KIT & DELIVERY SEE LIST

ON-SITE WARRANTY 1 YR - ONLY £100 - POS B15

- SpeedJet 200 - Inkjet Printer
- 50 Nozzle Inkjet Head
- 180 CPS Draft, 120 CPS LQ (100pi)
- Print Through 2.67 Pages Per Minute
- 128K Printer Buffer, 3-Built-In Fonts
- 1 x IC Card Slot for Buffer Expansion/Fonts
- Parallel Interface - Graphics Resolution 300 x 300dpi
- HP Deskjet Plus Emulation (PCL3+)
- Windows Driver Standard
- Semi-Automatic Single Sheet Feeder
- Optional Automatic Sheet Feeder - 70 Sheets (£35 + vat)
- Ultra-Quiet - Less Than 45 dB/A

PRINTER RRP ... £235
TOTAL VALUE: £235
SAVING: £56
SILICA PRICE: £179
£179
+ VAT = £210.33 PBI B222

300cps INKJET



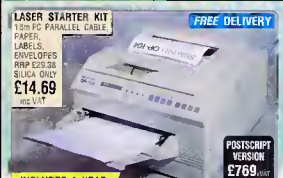
FREE! STARTER KIT & DELIVERY SEE LIST

ON-SITE WARRANTY 1 YR - ONLY £100 - POS B15

- SpeedJet 300 - Inkjet Printer
- High Capacity 128 Nozzle Head
- 24K Printer Buffer - 3 Built-In Fonts
- Large Ink Tank - up to 4.2 Million Characters
- 300 CPS Draft (100pi) - 300 CPS LQ (100pi)
- 80% Faster Than Most of the Competition
- 2 IC Card Slots for Buffer Expansion + Fonts
- Parallel Interface - Graphics Res. 300 x 300dpi
- HP Deskjet Emulation PCL3 - (Windows compatible using Epson/HP drivers included as standard in Windows 3.1)
- Built-In Automatic Sheet Feeder - 100 Sheets
- Economical to Run - only 1.3p per page
- Ultra Quiet - 46dB(A) Maximum

PRINTER RRP ... £350
TOTAL VALUE: £350
SAVING: £110
SILICA PRICE: £240
£249
+ VAT = £292.58 PBI B230

4PPM LASER



FREE! STARTER KIT & DELIVERY SEE LIST

ON-SITE WARRANTY 1 YR - ONLY £100 - POS B15

- DP-104 - 4 Pages per minute
- HP LaserJet IIppx Emulation (Windows compatible using Epson/HP drivers inc. as standard in Windows 3.1)
- Resolution: 300x300dpi - 14 Fonts
- Uses Original HP® Font Cards
- Postscript Emulation Option (Extra)
- Optional IBM, Epson & Diablo Emulation Cartridges
- Centronics Parallel & RS232C/RS422 Serial Interfaces
- 512K RAM - expandable to 2.5Mb
- Flexible paper handling: Standard paper cassette - 100 sheets, Optional 2nd Bin - 300 sheets
- Cable required: CAB 7500 for PC - £9.95 or CAB 7614 for ST/Amiga - £12.95

PRINTER RRP ... £899
TOTAL VALUE: £899
SAVING: £480
SILICA PRICE: £419
£419
+ VAT = £492.33 LAS B004

THE SILICA SERVICE

Before you decide when to buy your new printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals and accessories, or help and advice. And, will the company you buy from contact you with details of new products? At Silica, we ensure that you will have nothing to worry about. With our unrivalled experience and expertise, we can meet our customers' requirements with an understanding which is second to none. Complete and return the coupon now for our latest FREE literature and begin to experience the 'Silica Service'.

- FREE OVERNIGHT DELIVERY:** On all hardware orders shipped in the UK mainland.
- TECHNICAL SUPPORT HELPLINE:** A team of technical experts will be at your service.
- PRICE MATCH:** We match competitors on a 'Same product - Same price' basis.
- ESTABLISHED 15 YEARS:** We have a proven track record in professional computer sales.
- PART OF A £50M COMPANY** (with over 200 staff): We are solid, reliable and profitable.

BUSINESS + EDUCATION + GOVERNMENT: Volume discounts are available. Tel: 081-308 0886.

SHOWROOMS: We have demonstration and training facilities at all our stores.

THE FULL STOCK RANGE: All of our requirements are available from one supplier.

FREE CATALOGUES: Will be mailed to you with special offers and full details of hardware, peripherals and software.

PAYMENT: We accept major credit cards, cash, cheque or monthly terms. (49% 29.4% - written quotes on request).

HOT LINE 081-308 1111

MAIL ORDER: Order Lines Open: Mon-Sat 9.00am-7.00pm (Sat 9.00am-5.30pm) No Late Night Opening	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	Tel: 081-308 1111 Fax No: 081-308 0808
CROYDON SHOP: Opening Hours: Mon-Sat 9.00am-6.00pm Late Night: Thursday - 9pm	Debenhams (2nd floor), 11-31 North End, Croydon, Surrey, CR9 1RQ	Tel: 081-688 4455 Fax No: 081-688 4638
ESSEX SHOP: Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-5.00pm)	Kiddies (2nd floor), High Street, Southend-on-Sea, Essex, SS1 1LA	Tel: 0702 466039 Fax No: 0702 466033
IPSWICH SHOP: Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-5.00pm)	Unit 10, Victoria Rd, Ipswich, Suffolk, IP1 3EP	Tel: 0473 527052 Fax No: 0473 527052
LONDON SHOP: Opening Hours: Mon-Sat 9.30am-6.00pm	52 Tottenham Court Road, London, W1A 0BA	Tel: 071-580 1234 Fax No: 071-580 1782
LONDON SHOP: Opening Hours: Mon-Sat 9.30am-7.00pm	Selfridges (Basement Area), Oxford Street, London, W1A 1AB	Tel: 071-629 1234 Extension 3914
SIDCUP SHOP: Opening Hours: Mon-Sat 9.00am-5.30pm	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	Tel: 081-302 8811 Fax No: 081-308 0807

To: Silica Systems, ATSTR-0234-84, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND A BROCHURE ON THE SEIKOSHA RANGE

Mr/Mrs/Miss/Ms: Initials: Surname:

Company Name (if applicable):

Address:

Postcode: Tel (Home): Tel (Work):

Which computer(s), if any, do you own? 84P

E&OE. Advertised prices and specifications may change. Please return the coupon for the latest information.

MANGA

Time once more to turn into Barry Norman and review the latest batch of Mangas, and why not? Jonathan "Square Eyes" Maddock settles down with his popcorn for a feast of Japanese animation entertainment

Tetsuo 2: Body Hammer



Despite the "2", *Tetsuo 2* isn't a sequel to *Tetsuo: The Iron Man*, but is more a re-invention and re-make. For those not aware, the *Tetsuo* series of film were made by a young and highly acclaimed Japanese filmmaker called Shinya Tsukamoto.

Shinya has been compared to David Lynch (*Eroshead*, *Twin Peaks*, *Blue Velvet*), David Cronenberg (*Videodrome*, *Naked Lunch*, *The Fly*) and Ridley Scott (*Alien*, *Blade Runner*).

This is probably down to the fact that his films are so weird, but he does have wild and original visions all of his own. *Body Hammer* starts with the abduction of a happy family man's child by a deadly group of skinheads. In the struggle the man (Tamorah Toguchi; star of *Tetsuo*) is injected with metal.

Haunted by violent nightmares and experimented on by the gang's vicious leader, the man finds himself turning into a ferocious cyber-gun. Full mutilation follows and a savage battle ensues between Toguchi and the gang's leader. *Body Hammer* is quite brutal and disturbing at times, but

because the film is so bizarre you can't stop yourself watching it. The camera work is unusual and you get odd angles and viewpoints, but it does work surprisingly well, especially the energetic and often dizzying chase sequences.

The special effects are excellent and very effective. You could compare *Body Hammer* to films like *Blade Runner* and *Terminator*, but *Tetsuo 2* is just that bit more dark and bizarre than its western counterparts. It's incredibly weird and not for people with weak stomachs, but *Body Hammer* will become a cult classic. A must buy for fans of the original.



Certificate: 15
Year: 1993
Running Time: 50 mins
Price: £8.99
Action Rating: 7/10

Judge

The star of *Judge* is a quiet office worker called Ohmo. Ohmo looks like a bit of wimp, what with his mop-top haircut, geeky glasses and weird pet parrot, but he is in fact the all-powerful Judge of Darkness.

The wrongful dead continually seek retribution from within the spirit world for the crimes committed against them. The justice they seek cannot be decided by ordinary law, but instead is contested via the Law of Darkness.

Their pleas are communicated through the Statute Book, a living, breathing collection of judicial precedents recorded on human skin and is controlled by the merciless Judge of Darkness. The Judge hands out his sentence in various gruesome ways via the pages of the book.

The living have one defence against this powerful system and his name is Shiman, a man who is a sort of religious

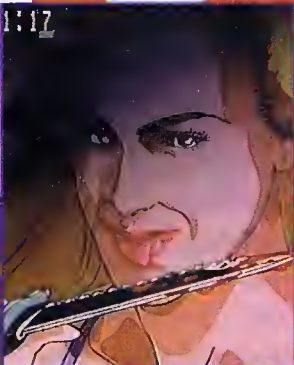
attorney entirely motivated by money. Ohmo's boss, Kawomoto is accused of killing his best friend, Yomanobe.

Yomanobe is also a major threat to Kawomoto and could become the head of the company. What ensues is a court room battle held in the Supreme Court of Darkness between the Judge of Darkness and Shiman and in fact you could be forgiven for thinking that this could become a Mongo version of *LA Law*.

Judge is a sinister thriller and very entertaining. Unlike other Mongos it's not too violent, but it is still animated to perfection. The only thing I found wrong with it was that it's a bit too short. By the time I'd got really into it it was just about ready to end.

Judge is a good Mongo and highly watchable, but lacks that something to make it a classic.





Crying Freeman

Chapter Two: The Enemy Within

Part two of the Crying Freeman saga. The beautiful Emu and Freeman Yah have now been joined in holy matrimony and have been chosen to lead the 108 dragons. The dragons are an elite fraternity within the Chinese Mafia and are constantly moving into a new era of bloodshed, extortion and vice.

Mysteriously the new regime of the 108 dragons comes under attack and questions are immediately asked to whether there could be a traitor within the fraternity.

Freeman Yah and Emu, who now sports a fancy all over body tattoo of a tiger, are up against the might

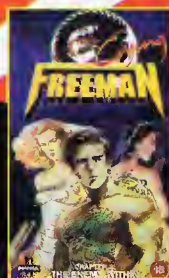
of a rival gang called the Komara. Chapter Two: The Enemy Within is basically more of the same that was seen in part one.

The first part may

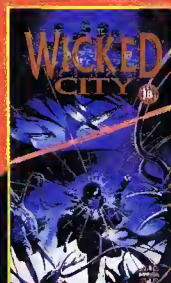
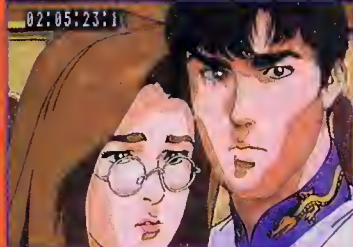
have been slightly better because all the characters were new, but part two is just as good in terms of content and leaves you thirsting for the third part.

Crying Freeman, the Tam Cruise lookalike, is still out and about on the killing front, but he comes up against some trouble via a mysterious woman. The violence is still as brutal and there is an abundance of nudity plus one scene I'd rather forget featuring a very large woman in the nude. Not pleasant!

Part two still retains that mixture of suspense, martial arts and bone-crushing violence. Owners of the first episode will want this desperately and if you haven't bought the first video yet, you'd better get a move on. Crying Freeman is top class entertainment and one of my favourite Manga films so far.



Certificate: 18
Year: 1992
Running Time: 50 mins
Price: £8.99
Action Rating: 9/10



Certificate: 18
Year: 1993
Running Time: 83 mins
Price: £12.99
Action Rating: 9/10

Wicked City

For centuries, a non-aggression treaty has existed between the human world and the realm of the demons. Without it humanity would be a terrifying and foul chaos of depravity and destruction. This pact is upheld by a group of undercover operatives known as the Black Guard, but at the end of the 20th Century the treaty is up for renewal.

Terrorists from either side seize on this time of uncertainty to step up their efforts to sabotage any agreement. Their target is the legendary Dr Giuseppe Malyart who is the only one who can sign the treaty.

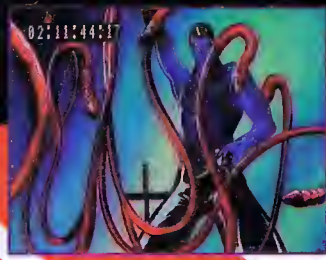
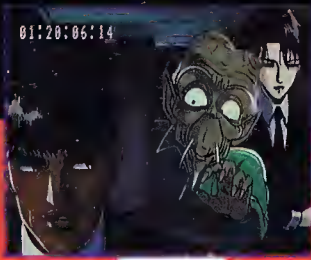
The signing will take place in Tokyo and the Doctor is put under the protection of two prime operatives from the Black Guard. Renzabaro Taki is a human while his partner is a beautiful woman called Maki from the realm of the demons. Taki sounds a lot like Clint Eastwood while his supernatural partner has a nifty line in dangerous

fingernails.

They both get upstaged though by the delightfully perverted Doctor Malyart who is the real star of the film and will have you holding your sides through laughing too much. Although Crying Freeman and Tetsua 2 were good, Wicked City just has to be the best Manga film this month.

It is probably best described as Dirty Harry meets James Bond meets a Nightmare on Elm Street. It could even be described as a love story that gets invaded by all manner of horrible and terrifying man-strasities from beyond.

The animation casts a tense dark atmosphere over the whole adventure and is absolutely first-rate. There are capacious amounts of sex, violence and swearing, but all these elements combine to make a truly wicked Manga film. Buy it now or be laughed at by small children for rest of your natural life.



In order to succeed, Atari's new Jaguar games console needs more than just a good spec. It has to compete with the assembled might of the Japanese, and with Commodore's new CD32 console, as well as the curiously titled yet menacingly threatening 3DO.

That it is the best specified of all of these is beyond question. Its 64-bit technology is unsurpassed in the games world, its four (yes, four) CPUs (set against the ST's one) mean that it is, in many ways, four powerful computers in

of the last year, hibernating and beaver away at the first games we will see?

Situated at a science park on the outskirts of Oxford, Rebellion are in a suitably hi-tech setting environment, mirroring the status they currently enjoy as one of the star developers in the Jaguar's third-party programming club.

Rebellion's Alien vs Predator is a mammoth, seven-level 3D spectacular, and guaranteed to bowl you over first time you see it.

So what of the new console? What will its incredible technical spec and

Will Atari's new Jaguar succeed where the Lynx failed? Is technical superiority enough? And what's it like developing games for the machine? Phil Morse found the answers to these questions and more when he visited two firms at the cutting edge of Jaguar development

A new



one!

When taken along with its recommended retail price of a meagre £200, it is easy to see the potential; its games are better than the very best efforts on PCs costing £1,500 and upward, and anyone who's seen, say, Doom on the PC will know that some of its best games are very impressive and would take something really special to better.

QUALITY GAMES

Perhaps more vital to the success of the Jaguar than anything else is the number and quality of games produced for the machine. Nobody will buy even the best specified machine in the world if the software support isn't there. The Japanese giants have got this right, and Atari must ensure that the Jaguar gets the same chance.

Two firms currently developing software for the console are Rebellion and Attention to Detail. Who better to tell us what it is like to program and what its potential is than the very people who have been, for the best part

vs Predator for it? Rebellion's Jason Kingsley:

"At the moment we're pushing the Jaguar as much as we can, but we think it can be pushed even further. We don't think it's even sweating with AVP."

When the ST first came out, people were amazed at the initial games which became available for it. But, as with every other platform, as the programmers began to get to know the machine a little better, to work out the special tricks of the trade, short-cuts and "undocumented" features (read: bugs) in its operating system, the scope and quality of the software released got steadily better and better, to the point where we now see complex games such as Zool converted across to the ST with very little change from the originals.

For the Jaguar, all of this means a very exciting period ahead. You don't believe me? Well it's time to look a little more closely

at what is involved already in producing a game for the console. Remember, the example we're about to look at is one of the first games made for the machine – and in the words of the song, things can only get better...

Obviously before programming Alien vs Predator, Rebellion had to sort out the anomalies of the machine, to get a grip on the best way to go about doing things. As it is such a new console, however, they soon found that programming far it involved a little more patience than with tried-and-tested technology. Jason:

"When you've got a beta [test] machine, and something goes wrong in a program, you don't know what to blame – your code, their tools, their hardware – it's quite challenging but can be a major pain."

However, this dipping of feet into new waters has its rewards too. To throw some specifications at you: With special programming techniques, Rebellion reckon they can squeeze 16 million still or 65,000 moving 16-bit images onto the screen, in 65,000 colours along with full stereo sound. Such power calls for extreme techniques of game development...

"Different processors can be used for

graphics, sound and gameplay with the Jaguar," says Jason. "Some companies have got scared and decided not to use them all!"

Nat Rebellion, though. Their dedication to achieving the best results possible is obvious from the start. Their route to developing game characters is a case in hand, as highlighted in the box-out.

The Jaguar may well be a machine poised at the beginning of a new age for computer software. With stereo, CD-quality sound, true colour graphics, and awesome raw processing power, the whole structure and scope of

any software house developing for the console will change. "There are going to be fewer people programming for the Jaguar," says Jason, "and in much larger teams. People will specialise in graphics or sound. But the value in the end product will be much better."

With a dedicated team making the soundtrack, another handling characterisations (already actors are being used in some games in the industry to "play" the characters in a game) and more teams for all the various aspects of game production, the finished products will begin to look more like full-blown films, with the difference being a



We don't think the Jaguar is even sweating with AVP...

– Jason Kingsley, Rebellion

Rebellion Software

Farmed over a year ago by scandalously young creative director Jason Kingsley, Rebellion specialise in 3D work, making them an ideal firm to be developing for the Jaguar, with its awesome graphics handling potential.

As well as Jason, the company's numbers are bolstered by Justin, Toby and Mike, who between them handle all programming, model-making, photography and general game design.

As well as working on Alien vs Predator, which has taken ten months to complete, Rebellion have three more projects in development.

One, Chequered Flag, looks to be the racing game which will wipe the floor with all others, and another four are currently awaiting confirmation. And the firm are not exclusively Jaguar-based, either, with interests in PC game development, too.

full degree of user-interaction with the "script" as it unfolds. "It's becoming quite awesome," says Jason. "We're being thrust into movie production - it's scary, but exciting. We're waiting for Spielberg to get in touch..." So will the Jaguar see off the competition? With the Sega and Nintendo systems beginning to show obvious signs of ageing, many see Commodore's new CD32 console, with its Amiga pedigree, as the nearest rival.

But, as Jason points out, people are parting old, unimpressive software straight from the Amiga across to the CD32, leaving the user unimpressed and hammering nails into the machine's coffin at the same time.

We also discovered from Rebellion that the Jaguar cartridges are capable of handling up to 16Mb of game information, cur-

rently limited to 2Mb only by the cost of production. So with the prospect of "games" (if we'll still be calling them that) in the future containing eight times the information of something like *Alien vs Predator*, the potential to see off everything bar the VHS video recorder for realism is hard to question.

About an hour's slightly more-than-leisurely drive away from Rebellion, in a farm barn just outside Warwick, reside Attention to Detail, who can lay claim to being the developers of the very first Jaguar game, *Cybermorph*,

which comes packaged with the machine. Attention To Detail advised Atari on some of the hardware specifications of the machine when it was being designed.

It's such tweaks, and the fact that Atari listened to the advice from those in the know, that seem to suggest that both the degree of Atari's commitment to the Jaguar as well as the technology itself are up to scratch.

"Atari were very helpful, incorporating a couple of new

instructions at our request," says director Chris Gibbs. It does indeed seem that the machine is well suited to the programming needs of those who have been charged with getting the games written and released - as well as those of the people who play the games in the end.

The follow up to *Cybermorph* is a similar-concepted game, *Battlemorph*, in which ATD hope to incorporate all of the things they wanted to put into *Cybermorph* had they had the time!

Of course, ATD are being paid for developing Jaguar games and so from the business point of view, the degree of confidence held by the firm in Atari's commitment to the Jaguar is by the by.

CONFIDENT

But for the record, ATD's cautiously sceptical opinion of Atari's degree of commitment changed markedly for the better after attending the Jaguar's launch, and

they are confident that the product at least has a good chance of being a runaway success.

As they are very much a technology-oriented firm, with their expertise lying in exploiting new hardware and pushing technical boundaries, they make a great contrast to Rebellion.

Indeed, the bits that Rebellion take so seriously sometimes even get formed out (no pun intended) of the building, leaving ATD to get on with the numbers!

"We have a guy called Dave Lowe who is tried and tested who does all the samples and music for us," says Chris. But, no doubt in recognition of the fact that software development in the future is going to require the large range of skills discussed earlier, they are currently in the process of setting up their own in-house graphics department.

I was bombarded with ream after potential ream of technical information at ATD - stuff like the fact that in *Cybermorph* all the landscapes are generated using fractals from a random seed (to me and this means that the potential for variety in the landscapes is immense) - but perhaps more important is the level of co-operation between ATD and Atari.

Atari's own design team were on-hand to test and advise on the levels in *Cybermorph*, for instance, and contact between Atari and the firm is frequent.

This impression I got - one of Atari stay-

breed



Three of Rebellion's models. From left to right: Skeleton and Zombie, from a new game working-titled *Dungeon*; and Predator from *Alien vs Predator*

Action FEATURE

ing in touch with their developers, and always striving to be helpful, was one which grew stronger as research for this article progressed.

Rebellion's Josan, for instance, had a breakfast meeting with Sam Tramiel (Atari's big man) just the morning before we came; and when Atari found out that we were doing this article, they briefed the companies first – same may say paranoid behaviour, but taking this views belies the obvious care and attention which Atari are bestowing upon making the Jaguar's launch a success.

Of course, if the Jaguar bore a Sega or Nintendo badge, the world would be

We're waiting for Spielberg to get into touch!

– Jason Kingsley, Rebellion

paired for complete domination within months by the little wander box; with Atari the predictions have been markedly more cautious.

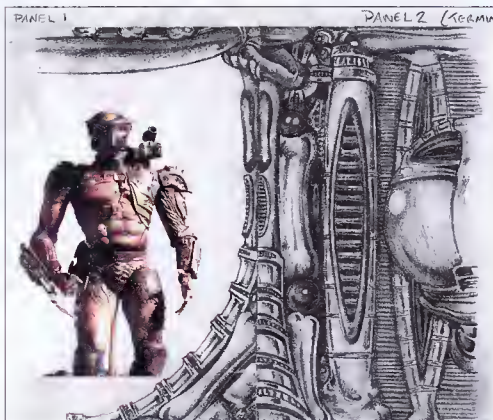
But with the ST range, Atari were, time and time again, accused of releasing a superior set of products, but falling short in the marketing and support departments to the extent that their apathy, arguably, led the ST to never reach the kind of market share it deserved. The Lynx – again, technically superior by murdered on its feet by the Japanese crew – is another case to point.

So to the Jaguar. Technically superior, and from the company that invented the games console as we know it, it deserves to do extremely well.

This time, with the commitment shown by Atari to the machine, it just might put Atari back in a world-beating position in the market console.



The fun-loving, happy-go-lucky Rebellion posse. From left to right: Mike Beaton, Stuart Wilson, Toby Harrison-Banfield, Justin Rae



Drawn in pencil onto tracing paper, this is an example of some of the detail that goes into a game such as Alien vs. Predator; this is part of one of Toby's panels form the terminal section of the game

Attention to Detail

Fourteen-people strong and headed by Chris Gibbs, Attention To Detail are far more openly technology-oriented than Rebellion, and so provide an interesting contrast.

Their offices are the epitome of laid-back, with real wooden beams criss-crossing the place, plants everywhere, and practically everyone presiding over a pile of their favourite CDs as well as the usual stationery and computer stuff. There's even a sign pinned up on the notice board politely banning swearing...

As well as software development, ATD are also active in the world of hardware and design, and in coin-op development, and even advised Atari on last-minute tweaks to the Jaguar's design, getting things altered. Now, for instance, it is possible to detail shading on objects more easily as you move towards and away from them (a device used to great effect by Rebellion in Alien vs. Predator).

You make me feel so real

Rebellion's approach to 3D sprites is a great example of their commitment to realism. They start by dicing all things silicon and electronic, and making detailed, proper 3D models of the characters. These may take an exceedingly large amount of time and effort to complete.

Justin:

"Zombie took about three days, made out of jointed, snap-together kits. To these are added plaster, tea-bags – anything to hand that works."

Getting the models exactly right is paramount, because the next, innovative step is the key to achieving convincing sprites on-screen.

On arriving of Rebellion we were curious to see a photographic backdrop, camera and lighting equipment set up alongside the usual assorted disarray of computer equipment. It turns out that the first stage of a character getting on-screen is its model having its photograph taken!

By adjusting the characters ever so slightly and taking picture after picture, and with a lot of patience (and film), it is possible to create convincing character movements by scanning

the pictures thus obtained directly into a development computer. This results in an exceeding realistic character with equally realistic movements on the computer screen.

In this way, the technology in the Jaguar is liberating for the programmer, as it allows the creativity of real-life modelling and movement to be incorporated into computer software in a far more natural way. It is actually, believe it or not, time-saving too.

"It takes about half the time to scratch-build a model, than to draw in 24-bit," says Justin. As and when you get a chance to look at a copy of Alien vs. Predator, the best way to see the advances in realism that the use of such methods afford the programmer is to get to (or get someone who knows the game to get you to) the room where the eggs, à la Alien, are situated.

Get nearer to them and they open menacingly, just like in the film. And all it took was a wad of latex, some skilful modelling and the ubiquitous 35mm camera. "There's no way the Amiga could cope with AVPI" Jason states, somewhat unnecessarily...

SPACE



BUDGET ACTION



Choose your chapter please. Hmm, not the one that looks like Gary Glitter, that's for sure

CRUSADE

Get spaced out on this mega-affordable board game conversion



OK, being known as "Tino cutesy platformer Hockett" for obvious reasons, I was a tad daunted to say the least when confronted with this budget science fiction RPG board conversion from Gremlin.

"Who?" I asked with rising horror as my mind clouded over with images of greasy youths getting over-excited in Games Workshop, hideously thick manuals, lots of complicated rules, and tonnes of mind-boggling icons to control.

Well, five panic-stricken coffees later, I gathered up all my courage and, after flicking through the manual, started to play the game. And how pleasantly surprised I was.

The story behind the game goes something like this...[dramatic voice over, star trek style please]. Warp Space, the parallel



Yeikes! It's a Soulsucker, sounds very painful

Aah, Gretchin attack. Let's hope those dice are on your side

other facility the chapter requires.

The fleet roams through the galaxy in the pursuit of the enemies of mankind. Task forces break away from it far individual missions or campaigns, and rejoin when their mission is accomplished.

To start off you will need to choose which mission you want to try and accomplish, and which chapter of marines you want (there are three, the Blood Angels, Imperial Fists and the Ultra Marines, so up to three players can play).

The computer plays the part of the aliens and you then take turns to move, fire or fight each other in hand to hand combat.

Points are awarded for eliminating opponents and completing the missions. Missions vary from "Seek and destroy" aliens have blocked corridors with rubble, so you must clear a way

through and destroy the dreadnaught (a fearsome war machine, developed by the alien followers of Chaos) to "Purge and withdraw". Intelligence reports that the alien vessel has three outer hull doors. Open an outer hull door and withdraw from the vacuum that will spread to the rest of the ship.

Success in combat is decided by a roll of the dice, so even if you launch a missile at an enemy at point blank range it is still possible to miss which may prove a little annoying.

The game can be viewed from a 2D view so strategy can be planned (it is also possible to scroll around to see the entire area) or a 3D isometric view to enable you to see a nice, grisly close up of completely annihilating your enemy.

A user-friendly icon system makes the game easy to control and is the main way of moving your marine around. Click on Scanner to reveal aliens or equipment to



Scan those aliens. That Medikit isn't going to help you now

view any equipment you possess, for instance.

There are many other details of the game which I could go into, but to really appreciate it all buy the game and see for yourself.

This is a darn fine budget release, RPG fan or not (admittedly I wasn't one before I played this). The graphics and music create a great space/science fiction type atmosphere.

Gremlin have also released another set of missions to complete so the game should last you a fair while.

TINA HACKETT

VISION

★★★★★★★★

AUDIO

★★★★★★★★

DIFFICULTY

★★★★★★★★

LASTABILITY

★★★★★★★★

Classic science fiction RPG without the boring bits! Easy to control, no tediously long rules to learn, and great graphics and sound.

87%

Publisher > GBH Gold
Developer > Gremlin
Disks > 1
Price > £9.99
HD Install > No
Size > 1/2 Meg

universe, the domain of Chaos, an ancient evil. War lasting over five thousand years wracked mankind. Aliens plundered, planet fought planet.

The Age of Strife as it was known, the greatest time of peril ever known to man, brought forth a brave warrior. A brilliant soldier, he reclaimed the worlds lost to Chaos and created the most powerful fighting force in the Imperium, the space marines.

Right, dramatic bit over, this is where you came in. The space marines are organised into self-contained chapters, each with its own fleet.

A chapter's fleet provides accommodation, training facilities, machine shops, armouries, shuttle silos and every



ROBOCOD

It's recently been released on budget, so for gamers having trouble with Millennium's classic platformer, here is a complete set of hints and tips to the first five levels



Level 1.1

This first world teaches you how to do basic elements of the game such as jumping over pits, collecting bonuses, bouncing an enemies, moving platforms and head-banging blocks.

It also teaches you that you must collect every penguin to complete a level-an important lesson if you want to get anywhere in the game. To the left of the start is a battery and an exit from the whole world.

From the last bonus block it is possible to jump into the edge of the roof above the exit where to your delight you will find two extra lives.

Level 1.2

Similar to the first level. Near the exit pole there is a penguin which cannot be obtained until the bonus block to the right of the exit is hit and you've collected the wings. This enables RoboCod to fly and you can swoop up to collect that elusive penguin.



Walk left from the start onto the top tennis ball and jump. You will find that there are two extra lives hidden in the roof.

About four screens from the right-hand corner of the world there are some bonuses. These are in a small room at the top of the screen but cannot be reached.

Just to the right of them is a plunger which, if jumped on, will drop the bonuses below the platform and you'll then be able to collect them.

Level 1.3

A penguin can be seen in the room above. The way to get to it is to travel to the top room at the right-hand edge of this world-head-butt the bonus black-you'll find an aeroplane.

In the room above is an extra exit which takes you to a bonus section. It is also possible to reach the top room by bouncing on the bird in the room next door.

To the left of the exit pole, immediately above the starting point, is an extra life cunningly placed behind the left boxing glove. In the wall immediately to the left of the two penguins are two batteries which you'll need to jump up to obtain.

Level 2.1

Travel up and left on the moving platforms for bonuses. Go right from the exit pole for extra bonuses.

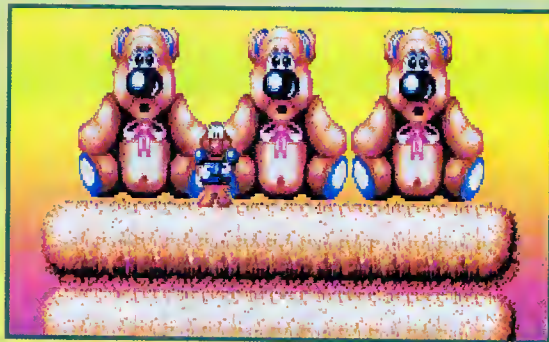
Level 2.2

Above your starting position there are a pair of wings. To collect them you must enter the second room along in the roof. Travel left as far as you can possibly go and then jump on the bird to go left a little bit further.

Once you have got the wings there is a bonus exit at the top-right of this room and more bonuses if you fly through the wall under the exit pole. There are also some batteries behind a solid wall. Travel to the top of the wall where you'll be able to pass through it.

Level 2.3

This world has no hidden bonuses contained in it.



Bonus World 1

Jump up and right to get past the poles, then jump into the cannon. After you have been fired, push up to gain extra height, then move left to land on the higher platform. Collect the bonuses and leap into the second cannon to reach the exit pole.

If you want extra bonuses (let's face it who doesn't!), jump around the roof above the exit pole and through a hidden hole in the upright. Finally, jump over the exit pole to obtain a hidden extra life.

Level 3.1

Travel along the floor for the easy route. Towards the end of this world, loads of bonuses

can be seen on the plates above. These are there to tempt you into taking on the birds but this will end up in you losing a life. Another exit can also be seen above the normal exit.

There are also some wings hidden among the many bonuses on the plates, so take on the birds because there is an extra battery up there anyway, then head for the bonus world exit. The normal exit will take you to level 3.2.

Level 3.2

There is a secret room above the first Bertie Bassett that you will face. Jump onto the vat of icing to drop into it. When you return

you'll be back in the vat. There is another secret room in the roof just to the right of the icing. It's quite similar to the first one, but the chocolate border is unwrapped so you can walk straight through it.

This leads to the exit pole. All the other routes are dead ends, but are worth exploring if you fancy collecting an extra life and bonuses.

Level 3.3

From the first moving platform you can see a hidden room. In this small room is a Penguin bar which can be jumped into to gain invulnerability. The first exit pole, placed at the bottom of the screen, is unfortunately a dummy! If you do go over by accident it will

return you to the start of this world.

Above the exit pole is an arrow pointing upwards. Jump up, above the arrow, to land on an invisible elevator.

This handy elevator will take you up to a new cavern and here you will find the way out.

Before you enter it though, jump up again where another invisible elevator will take you up to a hidden room and you'll find an extra life in there.

Level 3.4

Possibly one of the most difficult and frustrating levels in the game, so at this point try and gain the patience of a saint. At the bottom of the level there is a pair of wings hid-

den in the right-hand edge of the right-hand cake. This will make your life slightly easier, but remember to keep an eye out for the birds at the top of the level.

Level 3.5

A bit of a sneaky one this level because all the exits restart this section. The intelligent gamesplayer will notice a hole in the floor. Drop down the hole to enter the next level.

Level 3.6

This is perhaps one of the easiest levels to complete in Robocod and one of the most obvious. It's upside down which does confuse you at first, but it's easy once your eyes have adjusted themselves. Alternatively you could just turn your monitor upside down! One last thing is the fact that four batteries are on top of the top sweet.

Level 4.1

Relatively simple this level; use the enemies to bounce up to the bonus blocks and the rest of the level is straightforward.

Level 4.2

The first scrolling section and it involves bouncing along a runaway train. There aren't many enemies to kill. To complete the level all you have to do is avoid being trapped.

Level 4.3

Quite a difficult level this one. Near the middle of the world are three red jumping adversaries. Above the middle one is a hole in the roof. Bounce on the middle jumper to get in the hole. This hole will take you to the second bonus level.

Bonus World 2

Jump on the nasties to make your way up the screen. It's a difficult manoeuvre, but essential if you want to complete the level, so it's worth persevering with.

Luckily there is an abundance of extra lives and batteries at the top to make all your perseverance worthwhile. It's worth remembering that when you leave this level through the hole in the floor, you will go back to level 4.3 exactly where you left it.

Level 4.4

Quite complicated so keep alert! From the beginning of the level walk right and enter the small cavern. Walk through the right-hand wall of this cavern for a bunch of bonuses.

Retrace your fishy steps and then start walking right. Collect the bells from the next cavern that you drop into. In the next cavern you will find two penguin bonuses which have been placed in the roof.

Walk past these into the left-hand wall for the bonus of an extra life. Continue along the tunnels until you reach the central junction. There are four tunnels leading off from this point. The top left one is where you came from.

The top right one goes absolutely nowhere! Walk down the bottom right tunnel towards the wall, this will place you into a new room. The obvious exit is into the wall on the left, but this takes you back to the central junction.

Instead of that route it's possible to walk through the right-hand wall into a tunnel. There are some bonuses dotted about and

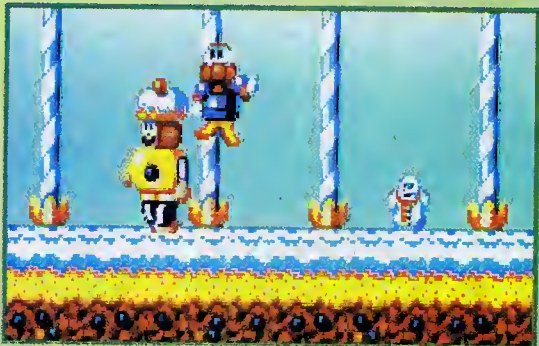
you'll end up a little way back from the central junction.

There are two objectives you must achieve from the central junction. First of all, take the bottom left tunnel to collect the penguins. Secondly, you have to run down the bottom right tunnel at top speed to break through the wall!

When you've gone down the bottom left tunnel, you will come to a long drop on the left-hand side of the screen with an elevator placed at the bottom. There are several rooms on the right of this lift-shaft, in each one there is a penguin.

When you've completed this little task, drop onto the elevator platform and, as you rise, jump into the first ledge in the wall and wait until the elevator has gone by. Next drop down the empty lift-shaft before the elevator comes back.

Walk right and you can either walk into the elevator wall to get back to the central junction or walk up the slopes and come running down to crash into the sealed bonus rooms.





Which way you choose doesn't matter. The top room is more difficult to get to, but has much better bonuses. When you've collected all your penguins run down the bottom right tunnel from central junction to crash through the wall.

Walk right to collect the umbrellas and drop into the bonus room. Collect all the bonuses you can, stand on the up arrows and extend to the exit pole.

Level 4.5

There are loads of curvy tunnels in this world which seem to serve no purpose except to allow a bit of fun by running around them. At the bottom of each tunnel there's a hole in the roof containing a bonus.

The first two tunnels lead to Bonus Worlds and the next three contain coins, lives and batteries. To the right of the exit pole is an extra tunnel. To hit it run from half-way down the last slope.

If you manage to get into the exit tunnel, at the very right-hand end of the world are 200,000 points hidden in the roof.

Level 4.6

Travel right from the start, up the incline and knock a train out of the bonus block. Jump on it to reach the tunnel placed at the top-left of the screen.

In here you can obtain a car and kill everything in the section. Also in the small room, there are two extra lives hidden in the higher side walls. At the top of the second slope from the starting point there is a room below you which you cannot enter.

Go to the bottom right of the section and jump on the plunger and this will open the door for you. Make sure you kill all the nasties with the car before entering because you'll lose it here otherwise.

Level 5.1

This level is fairly straightforward. There are four exit poles at the end, numbered one to four from top to bottom. Pole one returns you to this world again. Poles two and three take you to world two. Pole four takes you to a bonus world.

About two screens from the start there are some bonus blocks hidden in the floor. Don't kill the second and third birds as there are some more bonus blocks above them. Hit the blocks to knock out two batteries which you'll need to be able to jump on the back of the birds to reach the other bonus blocks.

Bonus World 3

You have a choice to go either left or



right from the start, but unfortunately you cannot do both. To the right there are three bonus blocks containing poison while to the left there are three good bonus blocks containing extra lives.

There are also two exit poles, both of which take you to Bonus World 4.

Bonus World 4

This stage appears identical to the last world. The good and bad bonus blocks have now been reversed. Make your way to the right and you'll find that the exit poles take you to Level 5.2.

Level 5.2

This basic section starts with domina caverns, progressing to playing cards and ending with yet more dominoes. From the start a penguin can be seen in each cavern and must be collected.

Towards the end, the caverns appear again. One contains a penguin, one contains absolutely nothing and the last one has the exit pole to take you to the next level.

In the empty cavern there's the only double-blank domino in the entire stage.

There's a secret exit in the blank domino which takes you to Bonus World Five. Above the cards towards the end of the section there is also an extra room. This is hard to enter and contains bonuses, a secret exit to Bonus World 5 and a bonus block containing a plane.

Bonus World 5

This bonus world comprises a mini-maze containing a few domino spots and a number of invisible walls.

Level 5.3

There is nothing special about this level, all you have to do is complete it.

Level 5.4

Things have gone a bit dull because just like the level before there is nothing here except the exit to the next stage.

Level 5.5

Go past the exit pole at the right-hand edge of the map and off the end of the map to Bonus World Six.

Oo now that's cheatin'!

As soon as the game starts, send Pond jumping up to the top of the first roof where you'll find an Apple, Earth, Cake, Hammer and Tap. Take the first letter of each item and you'll get AECHT which is an anagram of CHEAT.

Collect the objects in the right letter order to gain invincibility. If you then enter the first room and exit immediately via the left-hand point, all the game's doors will be unlocked.

Throughout the game you'll notice more of these cheat anagrams. The three words which you can spell are CHEAT, LIVES and POWER. Remember to keep your eyes open for clusters of bonuses coupled together.



A F WEAVER ENGINEERING

071 267 3308



PD Warehouse

LONDON N19 5AB

WE NOW STOCK OVER
400 GAMES DISKS
ALONE AND MOST OF

THEM ARE JUST £1.35 EACH!!! WE
ALSO STOCK VAST QUANTITIES OF UTILITIES,
EDUCATION, ART PACKAGES, MUSIC,
ACCOUNTS, BUSINESS, PROGRAMMING
AIDS, DEMOS AND LOADS MORE.

OUR FREE CATALOGUE CONTAINS OVER 30 A4
PAGES CRAMMED TO THE MAX WITH 1000's OF
UNBELIEVABLE BARGAINS

Please phone for free advice and quotations on all
your hardware expansions or upgrade requirements.

Callers by appointment only

40mb £185
HARD DISK

Including ext. case, SCSI drive, 1 Year warranty.

170mb...£299
340mb...£399

- All the above have these features:
- External metal case W/40W P/supply
- Whisper quiet fan • DMA cable/power cable
- GE-Soft SCSI host adaptor
- SD-Manager format software.

FREE ONE BOX OF
10 DD DISKS
WITH EVERY ORDER OVER £100
PLACED BEFORE FEB. 28, 1994

CALL FREE ON
0800 833618

FAX 081 880 3748
Visa and Master Cards accepted.
All prices include VAT.
Prices subject to change without notice.

DRIVES
A SHAYE PLC COMP.

2064 High Road, London N15 4NP

Premier Mail Order

Please send cheque / PO (made out to Premier Mail Order) / Access / Visa No. and expiry date to:

Dept STU97, 7-10 The Copricam Centre, Cranes Farm Road, Basildon, Essex S514 3JJ. Tel: 0268-271172 Fax: 0268-271173

Telephone orders: Mon-Fri 9am-7 pm and Sat & Sun 10am-4pm, We Are Open 364 Days A Year

P&P and VAT is included for all UK orders. Please add £2 P&P for Europe and £3.50 for Rest of the World

Next day delivery service available £4 per item. Same titles may not be released at the time of going to press.

(£&OE)

1st Division Manager	6.99
3D Construction Kit 2	32.99
A120 Airbus Europa Edition	22.99
A320 Airbus USA	22.99
AV8B Harrier Assault	22.99
Adams Family	8.99
Air Support	19.99
Alien 3	19.99
Ancient Art of War in the Skies	22.99
Another World	19.99
Archer Maclean's Pad	19.99
Armour Geddon	9.99
Atlatina	9.99
Award Winners (S12K)	19.99
Awesome	9.99
B17 Flying Fortress	22.99
Barbarian 2	19.99
Bart vs the World	17.99
Batman Returns	16.99
Battlechamps 1942	16.99
Battlechamps 2	16.99
Bart vs the Space Mutants	8.99
Beast 2	9.99
Blue Angels	19.99
Board Genius	19.99
Bully's Sporting Darts	9.99
Cage	9.99
California Games 2	16.99
Compoign (S12K)	22.99
Compoign 2	22.99
Compoign Mission Disk	11.99
Conan Fodder	10.99
Championship Manager 93	16.99
Championship Manager 94 Season Disk	16.99
Chess Engine	16.99
Chuck Rock 2	16.99
Civilisation	22.99
Colony 2	16.99
Combat Air Patrol	16.99
Creatures	16.99
Cruise for a Corpse	12.99
Cyber Kingdom Dizzy	14.99
Cyberpace	22.99
Dark Mire	21.99
Day	22.99
Dizzy's Calladon	16.99
Dizzy's Excellent Adventure	16.99
Daylight	22.99
Dynasty Lord 3	22.99
Dreamlands	19.99

Dream Team	17.99
Dynablast	19.99
Elite 2 (Frontier)	19.99
Elvira The Arcade Game	16.99
Epic	19.99
European Champions	17.99
European Super Soccer	19.99
Eye of the Storm	19.99
F15 Strike Eagle 2	17.99
F19 Stealth Fighter	12.99
F29	10.99
FA Premier League Football (1 Meg)	17.99
Fox Off Hockey	8.99
Fantastic Worlds	22.99
Fantasy World Dizzy	6.99
Fox Foot Dizzy	6.99
Fuel Fight	8.99
Fire and Ice	16.99
Firehawk	14.99
First Samurai + Mega Lo Mania	16.99
Flight of the Intruder	17.99
Footballer of the Year 2	7.99
Formula One Champions	7.99
Formula One Prix	7.99
Goal	20.99
Graham Gooch (1 Meg)	19.99
Graham Taylors Soccer Challenge	8.99
Hurdle	10.99
Gunship 2000	22.99
Hard Drivin 2	8.99
Hard Nova	8.99
Hercules	8.99
Hill Street Blues	8.99
Hockey	8.99
Huckberry Found in Hollywood	6.99
IK	6.99
Int. 3D Tennis	7.99
Int. Rugby Challenge	17.99
Int. Sport Challenge (S12K)	19.99
Ishor 2	22.99
Jaha, gir Khon World	7.99
Championship Squash	7.99
Jimmy White's Snooker	7.99
Kick Off 2	7.99
K.O. 2 - Final Whistle	6.99
K.O. 2 - Winning Tactics	6.99
Killing Game Show	9.99
Kingmaker	22.99
Knights	8.99
Knights of the Sky	12.99

Laender	9.99
Legends of Valour	24.99
Lemmings 2 (The Tribes)	17.99
Lemmings Double Pack	16.99
Lethal Weapon	16.99
Loom	12.99
Louis Esprit Turbo Challenge	7.99
Lure of Tempest	19.99
M1 Tank Platoon	12.99
Magic Boy	17.99
Mega Traveller (1 Meg)	12.99
Megawins	8.99
Midwinter	14.99
Midwinter 2	14.99
New Zealand Story	8.99
Nicky 2	17.99
Nick Fido	22.99
Nigel Mansell '91 World Champ.	14.99
Night Shift	10.99
No Second Prize	17.99
Obituary	9.99
Operation Hammer	9.99
Operation Stealth	13.99
Parasol Stairs	8.99
Parasol Stairs 2	8.99
Populous 2 (1 Meg)	19.99
Populous Promised Lands	19.99
Powermancer & WWI Data Disk	2.99
Premier Manager	17.99
Premier Manager 2	17.99
Pro Tennis Tour	8.99
Puadher	8.99
Rampart	16.99
Ready for the Skies	19.99
Renegade Vol 2	7.99
Risky Woods	8.99
Robin Hood	10.99
Robocop	6.99
Robocop 3	10.99
Scrabble	20.99
Sea Air Rescue	22.99
Secret of Monkey Island	12.99
Sensible Soccer (S2/93)	6.99
Shadow Lands	16.99
Shadow Worlds	19.99
Shuttle	8.99
Silent Service 2	22.99

Sim City + Populous	19.99
Simpsons	19.99
Sleepwalker	21.99
Slick	14.99
Space Crusade	16.99
Special Forces (S12K)	22.99
Spellbound Dizzy	16.99
Streetfighter 2 (1 Meg)	12.99
Striker	8.99
Strip Poker 2 + Data	6.99
Super Coulidon	17.99
Superfrighter	17.99
Switchblade 2	8.99
Super League Manager	17.99
Super Space Invaders	8.99
Team Yankee 2 (Pacific Islands)	19.99
Tennis Cup 2	8.99
Tennis Cup 2	14.99
The Greatest	21.99
The Politician	22.99
The Immortal	10.99
Thunderstrike	16.99
Tiki	6.99
Tornado	22.99
Tropic Calico GT Rally	2.99
Trois	16.99
Turbo Challenge	8.99
Turbo Challenge 2	8.99
Turbo Challenge 3	16.99
U96	22.99
Ultimate Golf	6.99
Ums Compilation	27.99
Universal Warriors	16.99
Utopia	8.99
Utopia + Data Disk	19.99
War in the Gulf	20.99
When Two Worlds War	19.99
Winter Supersports	7.99
Wizard	6.99
Ninjab Collection	16.99
WWF2	8.99
Zool	16.99

JOYSTICKS/ACCESSORIES

40 Capacity 3.5" Disk Box	4.99
80 Capacity 3.5" Disk Box	6.99
Cherlin 125	16.99
Competition Pro Extra	4.99
Competition Pro 5000	3.99
Quick Jay Tap Star	17.99
Quick Jay Turbo	10.99
Quick Jay Jet Fighter	10.99
Suncom Tac 2	7.99
Suncom Slick Stick	16.99
Wico "Q" Stick	4.99

EDUCATIONAL

ADI English (All ages)	17.99
ADI French (All ages)	17.99
ADI Maths (All ages)	17.99
Better Maths (11-16 GCSE)	13.99
Better Spelling (8-11)	13.99
Cave Maze (8-12)	9.99
Fraction Gobins (8-13)	9.99
Fun School 2 (UNDER 6)	6.99
Fun School 2 (6-8)	6.99
Fun School 2 (8-10)	6.99
Fun School 4 (UNDER 5)	6.99
Fun School 4 (5-7)	16.99
Junior Typist (5-10)	10.99
Magic Maths (4-8)	13.99
Maths Dragons (6-13)	9.99
Maths Mania (8-12)	13.99
Noddy's Play Time (3-7)	16.99
Picture Fractions (7-10)	9.99
Pictionary (8-11)	17.99
Pictionary (13-16)	13.99
Reasoning with Trills (5-12)	9.99
The Three Bears	13.99
Tidy The House (6-10)	9.99

3.5 BLANK DISKS

10	7.99	6.49	5.99	4.50
20	14.50	11.99	10.99	8.50
30	21.99	17.49	15.99	12.00
40	28.49	21.99	20.49	15.00
50	35.00	26.00	23.99	17.50
100	65.00	49.99	44.99	35.00

MAVIS BEACON TEACHES TYPING

Simply the finest typing program in the world, this award winning software takes you step by step through the keyboard. Coaching you at your own speed and skill level, monitoring your progress, the stunning graphics, the help facilities and complete typing text-book makes learning to type interesting and fun.

**MAVIS BEACON
TEACHES TYPING!**



**ONLY
£17.95**

Product	Price	Order No.
Mavis Beacon Teaches Typing	£17.95	9127

BOOKS

Atari ST Explored – This is probably the most comprehensive guide available to Atari GEM operating system and main ST/STE languages. The text is liberally illustrated with diagrams and examples making it easy to follow and understand.

Spreadsheets, The Easy Way – This flexible book enables it to be used with almost every major spreadsheet package on the market. It has easy step by step instructions for beginners, a how to section for reference purposes and so the book is suitable for ALL computer users.



**FROM
£8.95**

Product	Price	Order No.
Corish's Computer Games Guide	£14.95	9135
Real Time Graphics Book	£8.95	9146
Atari ST Explored	£8.95	9178
Spreadsheets - The Easy Way	£8.95	9251

QJ SUPERCHARGE JOYSTICK

The QJ Supercharger has many design features which will enhance your gameplay.

These include: Autofire, ergonomically contoured handgrip, durable nylon centre stick, 6 durable micro switches and four stabilizing suction cups.



**ONLY
£6.95**

Product	Price	Order No.
QJ Supercharger Joystick	£6.95	9125

EDUCATIONAL SOFTWARE

Computers and education go hand in hand, and nowhere more so than with the acclaimed Fun School packages. On offer here is Fun School 3 in two different age ranges.



**STAGGERING
LOW
PRICES**



**ONLY
£1.95**

Product	Price	Order No.
Fun School Under 5	£1.95	9196
Fun School 5-7	£1.95	9197

SALE SALE SALE SALE SALE SALE SALE

**ATARI
ST USER**

READER OFFERS

SALE NOW ON!

**Hurry, place your order
now while stocks last**

ACCESSORIES & SOFTWARE BOX

Even our Aladdin's Cave of goodies gets crowded from time to time, so here are a load of absolute bargains that we're practically giving away!

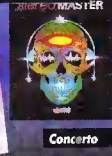
Mouse Mat £1.95 9126



Gastner Mouse £13.95 9380

Stereo Master £21.95 9262

CONCERTO



Concerto £25.95 9125

Lockable Disk Box (40) £1.95 9135

Order Hotline: 051-357 1275

Fax: 051-357 2813 General Enquiries: 051-357 2961

Order at any time of the day or night. Don't forget to give your name, address and credit card number

Call me!

Ian Waugh on a new musician's bulletin board, and why a previous effort floundered. Plus all the latest from the ST music world

There has been a lot of talk in the music industry over recent years about communication with the customer. Believe it or not, the music companies do want to talk to you, they do want to tell you about their new products and they do want you to have software updates.

What they're not so keen on is tying up several man-hours every day answering phone calls and mailing out new product information and floppy disks. It's not very cost effective for them but they do it because it's the only way to reach the customer.

One alternative to this approach is to use a BBS (bulletin board system). This has been tried in the past although not by any one company. There was a BBS called The Music Network which may or may not still be in existence, but never really took off.

It tried to pull together all the major music companies and offered a one-stop shop for musicians who could log on to the board, leave messages for the companies, download software and catch up on the news - which was much more up-to-date than a mag-

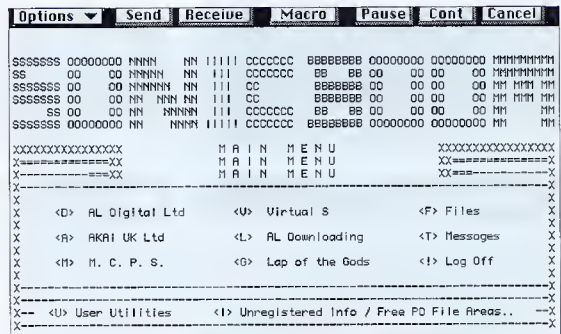
azine can present it. Its failure, I believe, was due to two main reasons. First of all, it cost money, something most musos usually find in short supply. It didn't just have a subscription charge but an online charge, too. It certainly stopped me joining - my phone bill is far too high without that.

Secondly, not many musicians have modems. I'm sure many more have them now than had them five years ago but the number is still small. Shame, because comms has a lot to offer.

As a musician, comms keeps you in touch with your fellow artists however far away they may be. You can post messages in conference areas and ask for help with software or musical instruments.

You can download software updates - providing the suppliers put them there! - which may be bug fixes or program updates which companies would usually mail free to registered users.

Also, for a computer user, comms gives you access to an enormous range of PD and shareware programs. Many of these are music-related, especially for the ST, while others are utilities and



You navigate your way around Sonic Boom with an easy-to-use single-key menu system

applications to make life with your computer a little easier.

The nice thing about comms is that everything is so quick. You can have an answer to a problem within a day or two and you can have the software now! Instant gratification.

The reason for this preamble is to do with an announcement which appeared in the last column's News section - Akai have set up a BBS called Sonic Boom. It's actually being run by a company called A L Digital which handle some tech support for Akai and are taking over distribution of the Akai sample libraries.

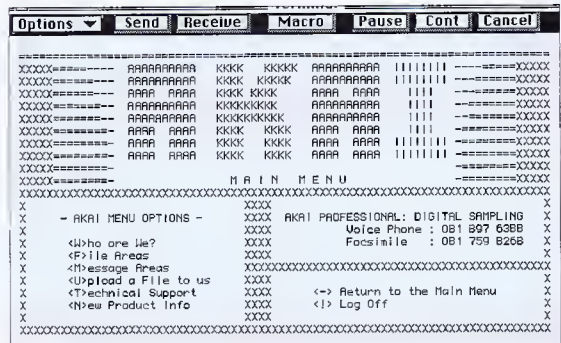
The BBS was in the process of being set up when I logged on and many areas were still under construction. They include the Akai

area, of course, one for Virtual S which will be about virtual reality, and one for the MCPS. There will also be a MUG called Lap of the Gods.

The only major software area at the time was some 4,500 PC files but the sysop, Dominic Hawken, is looking for some good ST material and with any luck there will be something for you to download by the time you read this.

The BBS will have a Questions & Answers section, a Members Notice Board, supply product news, hold details of software updates and let you download samples directly into your computer.

But the most important thing is - it's free! At least for the time being. Well done to Akai. Let's



The Akai conference area promises lots of product news, technical support - and software!

The Kyle Appeal

No, it's not Kylie Minogue. The Kyle in question is musician Kyle Harris who has contracted multiple sclerosis. He's trying to raise money for the MS Society and is being sponsored to achieve various objectives. One is to get as many mentions in the press as he can!

Another is to collect autographed photos of celebrities in the music, sport or media business. Kyle released a cassette of his

own music last year and Heavenly Blue Studios of Skelmersdale helped by taking gear to his house now that he's chair-bound.

Another project is to create a studio for similarly disabled people and to that end donations of suitable equipment would be appreciated. If any manufacturers, retailers or individuals think they can help in any way, contact Kyle on 0695 27709.

hope the BBS is a success and encourages other companies to follow suit. I do know that a music area on another BBS is trying to get off the ground so more news if and when this happens. Meanwhile, if you know of any BBS with good support for musicians or, indeed, if you have dis-

covered a good PD music program, drop me a line.

Sonic Boom is on 081-994 9119. Use the usual 8N1 setting in your comms software. It supports speeds up to 14000 baud. A L Digital's voice number is 081-742 0755.

Spaced out

It seems that rarely a month goes by without something from Heavenly Music dropping on my desk. This latest disk is Holst's Planets Suite – very appropriate, don't you think? It contains seven files – one for each planet – plus the usual excellent HM documentation.

The original work was written by Holst between 1914 and 1917 and was composed for a very large orchestra. The programmer, Nick Ruggles, spent five and a half months poring over the score in order to reduce it to a size suitable for a GM instrument.

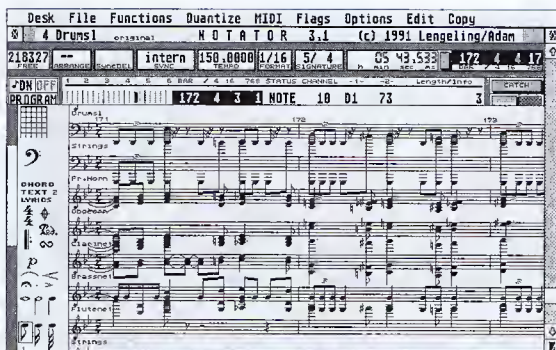
I did find that the files sounded slightly better when played on a Roland Sound Canvas than a Yamaha CBX-T3 which seemed to produce a rather

harder sound. Although all GM instruments sound approximately the same, there are differences which can show up if you customise a file to a particular instrument too much.

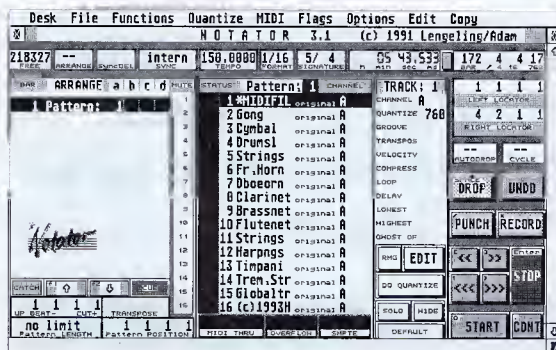
However, the Suite is something of a *tour de force*. You can see how much work has gone into its production when you examine the files. The velocities have been carefully adjusted to create the vast volume ranges in the work.

But if you're not in an investigative mood you can just sit back and listen. Very impressive indeed.

Holst's Planets Suite is £19.95 plus £1.50 p&p from: Heavenly Music, 39 Garden Road, Jaywick Village, Clacton on Sea CO15 2RT. Tel: 0255 434217.



One of the more quiet sections in Mars from Holst's Planets Suite



The programmer has convincingly condensed The Planets' massive orchestral score into a GM format

Music Update

- Got a Roland D50/550? Sounds OK are now distributing Sound Support's Classic Synthesizer Collection, a set of 84 sounds programmed to emulate old analogue synths using only analogue waveforms. It's available on an ST downloader disk and costs £28 plus £1 p&p. More from Sounds OK on 0276 22946.
- Rave. Not only a type of music but the name of a new ST sequencer. Well, it's not brand new, actually. It's an updated version of the Rave sequencer which was developed a couple of years ago by The Digital Muse who developed Virtuoso and Prodigy. The Muse have now had a name change to Muse Marketing and Rave now includes notation and event editing, support for Standard Midi Files and the ability to playback samples. It costs a very nominal £49.99. More from The Software Business on 0480 496497.
- How's your knowledge of Sys Ex? Fancy writing your own synth editor? Then CP-Gen is for you. You use different types of controller icons to transmit the various Midi messages and you arrange them on a control panel of your own design. There are three types of receiving devices which let you design your own Midi monitor to look at Midi activity in your system. We'll have a full review for you very soon but if you can't wait you can send £3 for a comprehensive demo pack which is refundable if you order the full program. CP-Gen costs £79.95 and is the first product from GRI Soft, who you can contact on 0494 443266.
- Yamaha, those bastions of PD support software, have commissioned the German Y-Not team to write an editor for the TG500. Take 500 has librarian and edit facilities for all sections of the module including voices, performances and multi-timbral setups. Unfortunately, it's not really compatible with the SY85. It handles certain aspects of the instrument but frequently reports a Midi Checksum Error. Still, that was not its purpose in life and TG500 users will be delighted. Contact Yamaha for your free copy: 0908 366700.
- Last April we reviewed a disk from Westec Services which set up a Roland MT32/CM-32/CM-64/D-110/10/20 with GM-type voices. The company have now added three other disks to their range. Get Dumps saves patch settings directly to your sequencer. There's a disk of Cubase Midi Manager files which let you control just about everything from within Cubase, and there's a Replacement Sounds disk which presents the 64 preset sounds with "improved" versions. All disks are £7.95 fully inclusive. More from Westec on 0621 88466.
- AudioCalc is a Professional Audio Calculator for the ST which performs five types of calculation frequently required in audio engineering: sound (delays, distances and frequencies), tape (various play time calculations), Music (tempo, note and echo sums), analogue (decibel conversions) and Digital (storage sizes, sample rates and so on). It looks like a very sophisticated piece of software. May have a closer look next month if I can get my maths head on. Meanwhile, it's yours for £39.95 from Hinton Instruments who can be reached on 0373 451927.
- The keyboard is far and away the most popular instrument used for Midi input although there are Midi version of guitars and many string and wind instruments. Now an enterprising fellow has designed a Midi Melodeon which was demonstrated at the Edinburgh Festival. However, it's still in the prototype stage while he seeks assistance from instrument manufacturers. For more info contact Steve Simpson on 031-555 2477.

Go with the BIG one!

Upgrade last month's Vidi ST(12) CoverDisk to the full package

Vidi ST(12) order form

Please send me the complete Vidi ST(12) package at £119 including UK carriage

ATARI
ST USER

I wish to pay by...

- ☐ Cheque/postal order payable to Rombo productions
☐ Credit card

Expiry date ____/____/____

Cord No.

Name (Mr/Mrs/Miss/Ms)

Address

Postcode Daytime phone

☐ Tick this box if you do not wish to receive promotional material from other companies

ONLY
£119

(including UK carriage)
SAVE £30



This great package includes a superb multi-media digitiser, comprehensive manual and phono cable. The Vidi ST 12-bit (4,096 colours) video digitiser can be used to produce colour or mono images or animations in almost any resolution and colour mode.

The manual clearly explains everything you need to know. It takes you through setting up, provides a tutorial covering the most important points of the package, and there's a lengthy reference section, a trouble shooting chapter and a glossary.

System requirements: Atari ST, STE and Falcon, double sided disk drive, 1Mb minimum, 2Mb recommended

To order please send this form to Vidi offer, Europress Enterprise Ltd, Europa House, Adlington Park, Macclesfield SK10 4NP, or telephone 0625 878888 or fax 0625 850652.

Overseas readers will be charged carriage at cost. Please call Rombo on +44 506 414631 to find out the cost of carriage to your country.

Don't risk missing your

ATARI

ST USER

ATARI
ST USER

Please reserve me a copy of Atari ST User magazine every month until further notice.

- ☐ I will collect
☐ I would like it delivered to my home

Name

Address

Postcode

Hand this order form to your local friendly newsagent TODAY and he'll make sure you never miss out!

And a message from us to your newsagent: Atari ST User should be available from your local wholesaler. If not, contact the Circulation Department at Europress on 0625 878888.

Computers are a bit like cars; you tend to take them for granted but when they break down your whole daily routine gets badly upset. Everything suddenly has to be done the hard way.

Just like walking or waiting in bus queues seems to be so much harder now than it used to be before you first got a car, suffering the indignity of having to write letters manually or doing without your daily on-line fix seems hardly bearable.

For a computer journalist, hardware breakdown is even more than an inconvenience — it's a disaster of the same order as an engine failure is for a taxi driver.

I recently suffered not just one but two of these disasters when first my Mega ST and then its external hard disk played dead. In the case of the Mega, it was nothing more serious than the power supply unit (easily though expensively replaced), but with the hard drive just about everything seemed to have gone wrong at the same time: the drive and the power supply.

TRICKY

By the time you read this, everything will hopefully be back to normal but the successive failures of computer and hard drive just when the deadline for this column was looming raised a number of tricky issues with regard to the Mac and PC emulators.

I was not, after all, completely computerless at any time since I am lucky enough to have an Atari TT030 sitting on my desk next to the Mega ST. So why not use that instead, it's a lot faster after all?

Now as far as PC emulation is concerned, the TT is definitely a no-go area, if only because it is physically impossible to install the

A brace of hardware disasters forced Günter Minnerup into some pretty desperate measures this month

When the chips are down

hardware emulation cards.

That didn't stop me, however, from making a desperate attempt to get the ancient PC-Ditto software emulator to work, with predictably unimpressive results.

Translating Intel into Motorola code "on the fly" and achieving a very high degree of PC compatibility in an ST environment was some achievement for the PC-Ditto team — even though it had to be paid for, of course, with very sluggish performance — but it is just too much to expect it to work on a 68030 processor run at 32MHz in a box that the developers of this emulator could never even had dreamed of at the time.

I even tried the shareware "ST emulator" Backward, but although this is concerned precisely with making stropy old ST software run on a 68030, it is Falcon-specific and doesn't want to know about the TT at all.

A shame really, since I vaguely remember the good old days when Atari launched the TT with much fanfare as the new supercomputer of the decade, and how it would be

bundled with a software PC emulator achieving unheard-of Norton speed ratings...

A shame also for the PC-Ditto developers, I guess, who may have done better out of writing such a 68030 software emulator than their ill-fated PC-Ditto II hardware board which never worked reliably and finally caused the company's downfall.

I then tackled Spectre GCR, encouraged by the 68030-related options in the configuration menu and the optimistic talk in the docu-

mentation with just one single floppy disk drive: it's an extremely frustrating experience indeed and you begin to understand immediately why Apple have not sold floppy-only systems for a very long time.

For a start, floppy disk access under the Mac operating system is even slower than under TOS, but the real headaches are caused by the Mac's need for frequent access to the System files.

With most of the more substantial Macintosh applications, it is just about impossible to fit everything

you need (system files, fonts, program files, data, not to mention desk accessories and CDEVs) onto a double-density disk so my advice is to forget the whole idea of floppy-only Mac emulation unless you have two drives and saintly patience.

Matters are only marginally better with PC emulation. The DOS operating system is more manageable from a single floppy, and enough of it memory-resident to require only very occasional access to a system disk after boot-up.

But you are certainly back in the command prompt stone age again because Windows is, of course, totally out of the question — my normal, fairly modest, Windows setup demands over 6Mb of hard disk space!

BEAVERING

It is after such trials, of course, that you suddenly begin to appreciate the merits of Atari's decision to install the entire TOS/GEM operating system and user interface in a ROM chip. Whatever the difficulties of distributing bug fixes and upgrades, it certainly makes for an eminently usable single-floppy setup.

There is, of course, a way of at least slightly alleviating the difficulties of single-floppy-only operation, provided you have enough memory — a RAM disk. Even if you do have two floppies or even a (functioning) hard drive, RAM disks can be quite useful. The installation and benefits of RAM disks in the PC and Mac environments will be the subject of next month's Emulation Aspects.

Now if you have never done this I would like you to try out Mac



The venerable PC-Ditto software PC emulator: this configuration screen is about all that will show up on the TT

Atari ST User back issues and binder

Have you missed one of our last six issues? Well now's your chance to bring your collection up to date – but hurry stocks are limited!



FEATURES: Adventure game round-up, public domain guide, mice and trackballs and word processing
REVIEWS: Prism Paint, Easy Text Professional, Warp 9 and Chronos 3D
ON DISK: STOS 3D VALUED AT £35



FEATURES: Databases compared, FontDOS explored, desk accessories, PC to ST transfer and colour printers
REVIEWS: Air Warrior, Word Fair II, Multiprint, Diamond Edge, Video Master and Noddy's Playtime
ON DISK: Mini Office Spreadsheet VALUED AT £35



FEATURES: Scanners, education software, communications guide, Falcon v Amiga and PCs and General Midi explained
REVIEWS: Lizard, Calligrapher 3 and Overcan
ON DISK: Mini Office Communications VALUED AT £35



FEATURES: How to write music with the ST, Midi buyers' guide, Falcon explored, floppy drive round-up, C tutorial and beginners' guide pt1
REVIEWS: DA's Vector and LaserJet 4
ON DISK: HSGH 2, Stereo Master software, VALUED AT £70



FEATURES: Upgrading the ST, Frankfurt Music Fair, hard drive management, piracy, PostScript printing and beginners' guide pt2
REVIEWS: Stylus 800 printer, Mult Studio Master and Callanus S
ON DISK: Personal Finance Manager VALUED AT £40



FEATURES: Graphics packages compared, fixing faulty STs and Atari in Europe
REVIEWS: Slave Driver, TruePaint, NeoDesk 3, NeoDesk G.L.I. Converter Professional, Musicom and Arabesque
ON DISK: Devpac 872 VALUED AT £90



FEATURES: Multimedia explained, monitor round-up, picture viewing utilities and how to compute safely
REVIEWS: Mouse Tracks 2, John the Composer, DataPulse Plus, Retouch/Didat, NameNet, DataLife and Editak
ON DISK: Video Master software and TruePaint demo



FEATURES: The world's greatest hacks, replacement desktops compared, software buyers' guide and Atari printing bureaux
REVIEWS: Direct-to disk recording software, MultiTOS, Pad 2 and SpeedGDS
ON DISK: STOS Compiler and STOS VALUED AT £50



FEATURES: Improvisation programs, professional Atari support and DTP guide pt1
REVIEWS: Video Titer, Falcon Speed, View II, scanning solution and NVDI 2.51
ON DISK: Word Writer VALUED AT £50



FEATURES: Ray-tracing for Atari computers, music on the Thames, printer round-up and DTP guide pt2
REVIEWS: Atari Works, HP Portable printer, Microvotec Cub-Scan monitor and Supermon
ON DISK: Prodata VALUED AT £90



FEATURES: Genlocking, home accounting, how software reaches the shop floor and jargon buster
REVIEWS: Protext 6, Chagall, Sweet Sixteen and Ultimate Virus Killer 5.9
FREE: 32 page ST Action games supplement
ON TWO DISKS: Demos of Protext 6 word processor and MicroProse's Dogfight air battle



FEATURES: Best software and hardware recommendations and hardware buyers' guide
REVIEWS: Omega II, Tabby, Studio Photo, Raystart and Vidi ST (12)
FREE: 64-page booklet
ON DISK: Prism Paint II demo



FEATURES: Transform images using morphing techniques
REVIEWS: Harlekin 3, Easy Text Vector, Chronos 24, Mortimer and Geneva
ON DISK: Vidi ST (12) software



Store your magazines in top condition with this high quality Atari ST User binder

	Price	Order No.
January 1993 + disk	£3.50	9239
February 1993 + disk	£3.50	9242
March 1993 + disk	£3.50	9244
April 1993 + disk	£3.50	9246
May 1993 + disk	£3.50	9252
June 1993 + disk	£3.50	9258
July 1993 + disk	£3.50	9259
September 1993 + disk	£3.50	9263
October 1993 + disk	£3.50	9264
November 1993 + disk	£3.50	9265
December 1993 + 2 disks	£3.50	9266
Christmas 1993 + disk	£3.50	9267
January 1994 + disk	£3.50	9268
Binder	£5.95	9478

All prices include VAT.
Please place your orders using the Readers' Offers form on page 85

Get into the net

The problem with the worldwide network of computer systems that is Internet is that it is so huge. It can be extremely daunting for newcomers to dip their toes into – especially if such toe-dipping explorations have to be accomplished from one end of a long-distance telephone line.

Of course, there are online help facilities, assuming you know how to use them. There have even been Internet training courses which took place on Internet.

What was really needed was a good manual covering the basic techniques and ground rules – preferably in layman's terms! This fact was not lost on author Ed Krol, and was the inspiration for his excellent work *The Whole Internet, A User's Guide & Catalog*.

The book starts off assuming that the user has little or no knowledge of Internet – either what it is, or how it works. The first few chapters discuss the network and its history, also going into some detail on the courtesies and protocols of using such a far-reaching system.

The rest of the book is divided into sections covering such black arts as finding software and then accomplishing the necessary file transfers, electronic mail, remote logins, reading news on the network, and a variety of other areas.

The style is chatty but informative, and there is a comprehensive index to help you navigate your way around some of the more complex issues. A useful pull-out Quick Reference Card bookmark is also provided, which short-lists the most common commands.

The Whole Internet can act both as a reference work and as a tutorial, allowing you to either read chapter by chapter or dip in to learn more about a particular function – although the later sections do tend to assume an understanding of the basic terminology, mainly that associated with the Unix system upon

André Willey takes a look at Ed Krol's comprehensive guide to the cyberspace world of Internet

THE WHOLE INTERNET



USER'S GUIDE & CATALOG



ED KROL

O'REILLY & ASSOCIATES, INC.

which so much of the Net depends.

The final section of the book deals with the resources available on Internet. One of the most frequently asked questions is not "how do I use Internet?" but "what is available there?". In fact, the answer to the first question is often a lot simpler than the second.

There are literally thousands of information sources scattered among hundreds of thousands of sites around the world. It's rather like going into a library and asking the librarian "which books should I read?"

Krol devotes nearly 50 pages to a listing of some of the larger resources available on the network – from Agriculture to

Zymurgy – taking in such diverse subjects as Finance, Medicine, Music, Oceanography, Religion, Science fiction, Sports, Travel and Weather Forecasting en route. Listings are given for the major usenet newsgroups in each subject area, plus associated file storage (FTP) sites and even online research facilities which can be contacted via the Telnet system.

As importantly, the book also tells you the various ways to use Internet to acquire more about itself. The gopher system is probably the most common, and can be used to find and access resources without necessarily knowing the full routing complexities that the system has undertaken on your behalf.

Krol also goes on to cover WAIS and the World Wide Web – a hypertext-based system which allows you to quickly cross-reference textual information to find out more details on a variety of subjects.

In fact, the book itself is a case study in using Internet. In his introduction, Ed Krol tells us that he first "met" his editor via electronic mail, and the entire contents of this 376 page book were transferred between author and publisher on a regular basis via Internet.

At the time of completing the work, Krol had not actually met in person anyone from the publishing house.

It's only possible to scratch the surface of such a book in this short space, but this is an indispensable work for anyone contemplating serious use of Internet – whether that be via a large business or university computer, or through an Atari ST and one of the UK service providers such as CIX or Demon Internet Services.

Title: *The Whole Internet, User's Guide & Catalog*
Author: Ed Krol
Publisher: O'Reilly & Associates, Inc.
ISBN: 1-56592-025-2
Price: £18.95

Super Software Sale!

ALL PRICES REDUCED

* COMPILATION SUPER DEALS *

Light Force (ST Only).....	£5.95
10 Great Games.....	£9.95
Magnetic Scrolls Collection.....	£9.95
2 Hot 2 Handle.....	£9.95
Virtual Reality Vol 1.....	£9.95
Virtual Reality Vol 2.....	£9.95
Hannah Barbera Collection.....	£6.95
Super Heroes.....	£9.95
Champions.....	£8.95

* BEST SELLER SPECIALS *

Frontier Elite II.....	£21.95
Zool.....	£18.95
Pushover.....	£16.95
Super Space/Pilfighter.....	£12.95
Street Fighter 2.....	£17.95
Dungeon Master/Chaos Strikes Back.....	£20.95
Populous II (SD).....	£22.95
Chaos Engine.....	£17.95
Premier Manager.....	£17.95
Lethal Weapon 1.....	£17.95
Learnings 2 (Tribes).....	£22.95

* CLASSIC STRATEGY GAMES *

Fire Zone.....	£6.95
Borodino.....	£9.95
Vulcan.....	£17.95
Overlord.....	£17.95
Frontline.....	£18.95
Ancient Battles.....	£18.95

* BARGAINS AT £5.95 EACH *

* OR ANY TWO FOR £10.95 *

Sonic Boom - Twin World - Basil - Photons Storm - Smash TV - Big Run - Fighting Soccer - Fun School 2 - Heroes of the Lance - IK+ - Manchester United - European Super League - Hudson Hawk - Carrier Command - Galaxy Force - Total Recall - Gold Runner 2 - Data Disk - Bubble Bobble - Tetra Quest - Football Manager 2 - Bloodwych - Rick Dangerous 2 - Blue Angel 68

* JOYSTICKS *

Video Joystick.....	£3.95
Quickshot II (Autofire).....	£5.95

* RIBBONS *

Star LC10 Mono.....	£3.45
Star LC10 Col.....	£3.95
Star LC24/10 Mono.....	£3.95
Citizen 120D Mono.....	£3.45

THE ATARI FALCON Q30

	1 Meg	4 Meg
No HD Drive	£479.95	£649.95
65 Mb Drive	£479.95	£749.95
127 Mb Drive	£479.95	£849.95
208 Mb Drive	£479.95	£929.95

* STE COMPUTERS *

Family Curriculum.....	£199.95
Music Pack.....	£199.95

* 3.5" DISKS WITH LABELS *

	DSDD	DSHD
10 =	£4.40	£5.95
50 =	£19.95	£24.95
100 =	£39.95	£44.95
200 =	£69.95	£84.95

* ACCESSORIES *

12 Holder Slimpak.....	£0.95
100 Holder Lockable.....	£7.95
150 Holder Stackable.....	£15.95
3.5" Disk Labels 40 for.....	£0.95
3.5" Head Cleaning Kit.....	£3.95
ST Dust Cover.....	£3.95

* PRODUCTIVITY SOFTWARE *

Playback.....	£19.95
3D Construction Kit V1.....	£19.95
Data + Security Handler.....	£6.95
Utility Paint V2.....	£39.95
Utilities Plus.....	£39.95

Send £1.00 in Stamps for our DISK CATALOGUE
P&P £1.50 PER ORDER
£2 EXTRA PER 50 DISKS
£5 FOR COMPUTERS
We accept all major Credit Cards

MODERN USERS CALL GAMES HQ ON:

PROTOCOL BBS*
0642 596 597 - 24 HOURS

DOWNLOAD OUR PRICE LISTS, OR PD PROGRAMS. LEAVE MAIL HAVE A CHAT WITH THE SYSOP

*** GAMES H.Q. *** Box 17,
Coulby Newham, Middlesbrough,
Cleveland TS8 9YW

FAX: 0642 822 700

TEL: 0642 595 182

JEWEL PD

ATARI, AMIGA & PC SOFTWARES
(Please specify which computer)

19 Hodgkinson Rd,
Kirkby-In-Ashfield,
Notts NG17 7DJ
Tel: 0623 754061

D045 Sid James Demo STE 1Meg	U004 Double Sentry Accounts	T005 Geography
D050 Pandemonium Demo	U016 Acc Tools/ST Tools	T010 Typing Tutors
D067 Dreams Demo 1Meg	U020 Gemini Alternative Desktop	T012 Kid Edu. Programs
D074 Hardcore Dance II	U057 YH 2nd Atari Manual	T021 Dot to Dot Kids Art
D075 Crossbones STE Demo	U068 Database Master One	T052 X-Stitch & Puncher
D076 Extreme Rage STE 1Meg	U076 Disk full of copiers	T056 ST/OS/USE Deskline 8
D078/79 Dreamzone (2 Disks)	U104 Disk Cataloguing program	W056 We also stock POWERIST and OCL Licenceware disks
G093 Blast STE Great game	U107 News-Disk Creator 1Meg	
G094 Blockbusters Quiz	M050 Fonts 40 in PC1 & P11	
G095 Grav2BS Guardian	M072 Megastar 2.4 Tracker	
G096 Match 2 Puzzle Game	M088 68 SPL Samples & Tracker	
G098 Obscure Nafurist	M120 Kosmic 4 New & better	
G101 Brain Damage Quiz	M121 Merka Modules	
G102 Grandad 2 (2 Disk) 1Meg	M123 Zonk 1 MG Patternmaker	
G104 Bio-Hazard 1Meg Game	M124 Paintpot Art Package	
W001 ST Writer & 4 others	T031 The Planets Slideshow	
W012 DB Writer Wordprocessor	T035 Circuit Designer & more	

FREE printed catalogue, please send a stamp
DISKS: £1.25 each or order 10 at £1.00 each
MAKE CHEQUES/POSTAL ORDERS PAYABLE TO JEWEL PD

SPECIAL OFFER

FALCON CLASSIC COLLECTION
Includes Falcon original and

revisions disks 1 & 2. View and boxed with manual. All for only £3.00 inc. P&P

Prices include
FREE postage & packing in U.K.

A.W.F. PDL ATARI ST/STE PUBLIC DOMAIN SOFTWARE
123 HAZELWELL CRESCENT, STIRCHLEY,
BIRMINGHAM B30 2QE, ENGLAND
021-458 4345 or 0374 497425

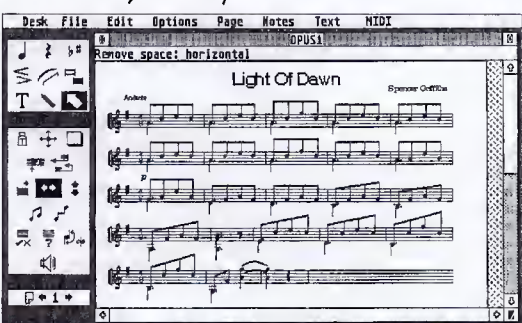
FOR A COMPLETE DISK CATALOGUE
SEND £1 OR A BLANK DISK.

PD Software only £1.50 each, 10 or more £1.25 each,
15 or more then choose two free PD Disks

We stock: Demos, Art, Music, Business, Clip Art, Games, P.O.V., General, Utilities, Program, Sound Trackers, Adventure, Education, Communications, plus loads more!!!! Powerlist/Licenceware

Please make cheques/postal orders payable to A. FERN

Take Control SharpScore v3.1



DEMONSTRATION DISK AVAILABLE

Upgrade available for registered users.

SharpScore is the ultimate publishing system for music. It is the only professional product of its kind for the Atari ST and Falcon, and it is used by musicians, composers, orchestras, copyists and publishers.

Unlike other packages, SharpScore is based around the page layout, for complete control of the final result in the highest quality. You have complete control over spacing, text fonts, note beaming, line thicknesses, and a variety of other parameters. It is powerful to use, but incredibly easy to learn.

This new version of the program incorporates many new powerful editing functions, Automated Part Extraction, optional Automated Note Beaming, larger symbol repertoire, extended chord window facility, real time entry from a MIDI keyboard, playback of scores, graphics functions import and export and MIDI file import and export. This allows the transfer of files from sequencer packages for typesetting and printing.

For more details, a demonstration disk and example printouts, or to place an order, contact:

Take Control
Institute of Research & Development
University of Birmingham Research Park
Vincent Drive, Birmingham B15 2SQ, U.K.
Tel. 021 415 4155 - Fax. 021 415 4156

Really good enough to eat

No, not the drop-down kind, rather the menus you find yourself staring at blankly in restaurants wondering whether you can afford that delicious sounding French concoction with the unpro-

Andrew Wright starts a new series on practical document design. This month it's the turn of menus...



Choose the right font and graphic – this is PageStream's Artistik font

nounceable name, as well as a starter, or whether you should pretend not to be hungry...

It's surprising how many restaurants can cook up a wonderful meal but let themselves down badly with poorly presented written material such as adverts, wine lists and menus.

I know of two upmarket places locally that use an old typewriter with scrawled corrections in biro – not the best way to encourage window shopping customers to wander inside or those drinking in the bar to stay and dine. I don't sup-

pose many of you will actually own restaurants but if you have an enterprising nature, local caterers present an opportunity to put your DTP talents to good use.

With a little application and the right approach, designing and producing menus can make you some money.

Once you have a selection of ten or 20 standard designs, put them together into a portfolio and show them to your prospective "clients" as you visit them.

You'll be surprised how many restaurants are looking for a low

cost, reliable service and if you've got ready-made designs that need a minimum of alteration, you can do a quick, professional looking job.

In terms of actual design, the typeface is very important. Script typefaces tend to work best but they can sacrifice legibility if used at smaller point sizes.

If you're having to cram a lot on a page, go for an old style or transitional serif typeface or perhaps an italic instead. Garamond Antiqua is a good choice for

PageStream users while the ST Club's Derwent is worth considering for Timeworks users.

Small logos and relevant graphics can be used artistically to liven up the menu page and borders can also be a good idea – try a border made up of bunches of grapes or wine glasses for a wine list and perhaps knives and forks, plates or something like candlesticks for the menu itself.

Size is important too. While A4 is perfectly acceptable, many restaurants prefer A3 sized or even larger menus that open a bit like newspapers and while you can create large menus by tiling your output, reproduction will probably require a large commercial photocopy. Other places – particularly Indian and Chinese takeaway restaurants – use A4 pages folded twice to create a small booklet.

Consider the use of tab leaders (lines of dots or dashes automatically inserted when you insert a tab) to ensure that the price and the product can be correctly linked.

This is particularly important in wine lists which tend to be quite densely packed with information. Don't forget all the other things that restaurant customers will need to know such as whether service and VAT are included.



A full page menu being designed using PageStream

Only ten months to Christmas

Monotype have launched a Christmas font pack but as they only told us about it in December, it was a little late to review it in time for Christmas!

However, the pack is such good value that it's well worth a quick look. For £49 you get 15 PostScript Type 1 fonts but the interesting thing is that they're also very good for documents such as menus.

One is a picture font called Xmas Icons, but the other 14 are ideal for all sorts of occasions.

Secondly there are two very pleasing serif fonts for body text – Ellington and Horley Old Style, each in Roman, italic, bold and bold italic.

Thirdly there are three script faces, Commercial Script, Engravers Old English and French Script, and two display faces, Colonna and Falstaff Festival.

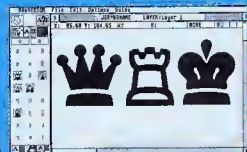
And finally there is Centaur Festive Italic, an exciting italic face with some interesting swash characters. For more information call Monotype on 0737 765959.

FONT OF THE MONTH

This month's font answers (rather belatedly) at least half a dozen queries from readers over the past couple of years. Yes, there is a chess piece font and yes, it's freely available!

The font in question is an Adobe original in PostScript Type 1 format suitable for use with PageStream or Didot or converted using Fonty for Calamus, and is freeware, being available on both CIX and Compuserve and probably one or two of the font-oriented PD libraries such as ST Club and Image Art.

Cheq consists of all the black and white pieces with or without a diagonally shaded background. It is ideal for chess buffs who want to produce club magazines or pass around complex problems, not to mention those of you who can see the attraction of incorporating chess pieces into graphics designs and logos.



Don't fancy the rook's chances...

ATARI ST REVIEW

LEADING EDGE

**FULL REVIEWS
OF THREE
MAJOR NEW
PROGRAMS**

**REPLAY STEREO
- SAVE £50!**



● Cubase Audio

Easy Text Vector

Prism Point 2

ATARI ST

REPLAY STUDIO

1. The first step is to identify the problem.

- For what reasons, precisely, has the ramp selling the weapons and how
- Using materials to create colored materials
- Special effects, price, sales, amount
- All weapons on the same day

Conclusion studies
showed that
these studies showed
that the
study was
conducted

**116 PAGES
- THE BIGGEST UK
ST MAGAZINE**

**INSIDE:**[illegible]

OUT NOW!

Starting up a small business is unlikely to result in a spell behind bars unless you deliberately set out to deceive or deal in stolen or otherwise illegal commodities.

However, there are many pitfalls for the unwary, and failure to comply with requirements can result in major problems.

Learning what the law says about business and taking steps to comply will mean you are sufficiently well organised to meet not only every requirement of the law, but many of the requirements of successful business management too.

Where does the ST fit in to all this? It can take the tedium out of the work involved and help you stay on top of figures, correspondence and other tasks involved (see "The ST and the law").

One of the major questions any business must answer at the outset is: What legal form should the business take?

There are four main options:

1. Sole trader
2. Partnership
3. Limited company
4. Co-operative

If you are starting up entirely on your own, the most likely form for your business is that of sole trader.

For businesses involving two or more people, the options are partnership, limited company or co-operative.

Sole traders can trade under their own name, or under a business name and despite the title, can employ staff.

The major disadvantage is that if business does not take off the way the business plan (remember that?) indicated, personal belongings can be seized by creditors or their

Making it legal

"How do I know what I'm doing is legal?" is a common question asked by people starting a business. Richard Williams brushes up on business law for the first of a new series

agents seeking recovery of money.

If you opt to use a business name rather than your own name, ownership of your business will not be immediately apparent to others. The law says you must take action to rectify this.

The name and address should appear on all invoices, orders, receipts, written demands for payments and business letters. It should also be displayed prominently at the place(s) where business is conducted, and you must divulge ownership of the business and its address on demand.

Successful sole trader businesses often change their status to limited company to take advantage of limited liability protection.

Similar statutory rules apply to a partnership, but there are major differences in other areas. For a start, you are not on your own if you have a partner, or partners, with equal or varying stakes in the business. If your partner builds up debts, you can be held totally responsible, as any of the partners can be pursued.

This applies whether or not you knew the debt was being incurred. Partners should have an agreement drawn up by solicitors to prevent

problems arising from possible future break-up.

It is usually easier to draw money, as a direct loan, from a sole trader or partnership business. If you go into businesses either as a sole trader or a partnership, statutory benefits for the self-employed are considerably less than for the employed.

LIABILITY

With limited liability companies, the directors are not personally liable for debts incurred by the company, apart from non-payment of National Insurance contributions. This limited liability factor is one of the major differences between trading as a sole trader or partnership, and as a company.

A company is a legal entity in its own right, whereas a sole trader or a partnership is all about individuals whose personal assets can be seized if debts arise.

There must be at least two shareholders in a company, and at least one of these must be a director. There must be a company secretary who could be your accountant, your solicitor, one of the directors or a shareholder.

Apart from the limited liability

status, which means directors and shareholders lose only their share capital if the company fails, advantages include being able to raise larger sums of money more easily, and the ease with which outside investors can be accommodated.

But there are disadvantages, too, like more expensive annual accounting charges, possibly greater overall taxation, public disclosure of some information and inability to offset losses against tax paid in previous years.

A workers' co-operative is owned by everyone who works for it. Decisions are made democratically. However, that does not prevent there being managers and supervisors, just like in any other business.

Co-operatives are still quite rare in Britain. Detailed information is available from: The National Federation of Worker's Co-operatives, Vassalli House, 20 Central Road, Leeds LS1 6DE, Tel: 0532 461738.

Those in Scotland should contact: The Scottish Co-operative Development Committee, Tel: 041-554 3797. In Wales, the information is available from: The Co-operative Development and Training Centre, Tel: 0222 554955

The ST and the law

So how can your ST help you to stay on the right side of the law? In lots of ways. There could be lots of correspondence between you and Customs & Excise, the Tax Inspector, the Department of Social Security, pension and insurance companies and potentially dozens of others.

Be prepared - is that word processor that came with your new or second-hand ST really up to the challenge? Have you looked at Protext 6 yet (contact Arnor, 0733 68909), or one of its leading challengers, Redacteur 3.15 (contact The ST Club, 0602 410241)? The speed, power and features may amaze you.

The curse of the small business is working out VAT (if you're registered) and income tax returns. But they are legal requirements and you will have to face them.

Would a 3D spreadsheet like Microdeal's 3D Calc (0726 68020) - which features integrated editor, programming language, graphics and extended statistical functions - make the going easier? A well-modelled worksheet will literally save you hours of valuable time.

Keep track of all things financial, as and when they happen, with The Biz Plus. This is truly professional accounting software on a budget, and it's easy to use!

Details from Orpheus Systems (0424 436674). There's also the excellent Double Sentry - details from Graham R Hucheson at Finansoft,

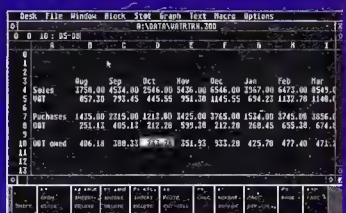
45 Connaught Street, London W2 2BB.

Whether limited company, sole trader or partnership, your business needs a logo that people will remember, which you can use on letterheads, statements, invoices and a whole host of other printed material.

And don't forget those notices you need to place in your premises to comply with the law. There's plenty of scope here for those great all-rounders, Timeworks (contact Electric Distribution, 0480 496666), or Calamus (contact JCA Europe, 0734 452415).

Planning the work of starting and running a small business, meeting deadlines and keeping appointments is a full-time job in itself.

An organiser like Day By Day can help enormously. More information from Digita International (0395 270273).



Helping you stay legal - 3D Calc works out the VAT effortlessly

Don't risk missing your

ATARI ST USER

ATARI

Please reserve a copy of Atari ST User magazine every month until further notice.

- ☐ I will collect
- ☐ I would like it delivered to my home

Name

Address.....

Postcode.....

**Hand this order form to your
local friendly newsagent
TODAY and he'll make sure
you never miss out!**

And a message from us to your newsagent: Atari ST User should be available from your local wholesaler. If not, contact the Circulation Department at Europress on 0625 878888.

classifieds

Through our pages you can reach over 100,000 ST owners - and the first five words of your advert are absolutely free! Should you want more space, you'll find our rates offer unrivalled value-for-money - for instance, 25 words cost just £6. Fill in the form below and send it to us with your payment (if applicable). Note that all software must be boxed and with the original disks and manuals - and remember to include your telephone number!

ATARI
ST USER

classified

NAME

ADDRESS

POSTCODE

DAYTIME PHONE

Please include my advertisement in the next available issue of Atari ST User. I confirm that the advertisement is not selling illegal copies of software, or hardware that does not belong to me. I permit you to publish my address and/or telephone number only if I have included these details within my advertisement copy. I am over 18 years of age (applicants under 18 must be a parent or guardian to sign below).

SIGNED

CATEGORY: ☒ HARDWARE ☐ SOFTWARE ☐ CONTACT ☐

					FREE!
					£6
					£10

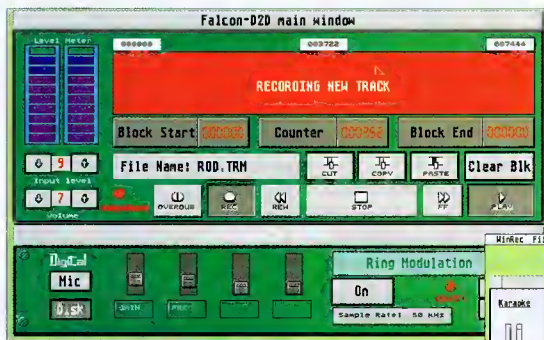
Remember to include your phone number/address in your advert, as well as on the form!

- * 1040 STE Family Curriculum 2, Hi-res monitor (£m144) 2 joysticks, superb music, sound sampler software, £800 worth games, serious, educational, 60 magazines... 100 cover disks, cost £1,200+, set for £400 one, phone 0342 733293
- * Pimpler released, contact Bob, 3 Windmill Close, Haywards Rise, I.O.W.,
* Hard Drive? Z, £5, 08-977 1905.
- * Epson LX86 printer print-out matrix, Atari monitor (£m144), 2 joystick, superb music, sound sampler software manufactured in 1990, Atari Mega STE/M104 mono mode, external disk drive FR202R, OEM AC Adapter, Books, software. 0954 780442.
- * STEFM with IMb upgrade, Tower case, 2 floppy, £225 Hard Drive, Nakshe Mouse, Lots of Software, Mags and Manuals £390 0635 865723.
- * 1040 STE plus Phillips CM8B33 MK2 colour monitor, Cumans disk drive. Ist Word v3.2, Data Manager pro 3.0, 20 megas mags and software £400. 081 890 2397 after 6pm.
- * Want to swap P.D.J. Send discs of PD and SAE To Mr C Munro, 26 Manor Crescent, Surbiton, Surrey, KT5 1TS.
- * First Word+ V31S, EZDS, Database management for Azari ST £12 /Tel 0703 321102.
- * SZP 5TFM 2.5Mb D/J5 Drive, second Floppy Drive, KXP-1124 printer, 512MB monitor, plus software. £275.
- * 1040 STE family games for sale! All boxed originals. Prices from £2. For list send SAE to: Richard Cottrell, 34 Grange Rd, St Andrews, Fife, KY16 1BL.
- * Hardware/Software books etc. Loads of good stuff.
£1.95 each. Tel 0345 254945
- * Mega STE, 4Mb RAM, 1.44Mb floppy, 520Mb Hard Drive, External Drive, SP1144 Monitor, Vidl ST, Atonce, Micc, loads of software (business and games). £750.00
See David, 01453 82945
- * Wanted, Mono 800x2, CPK-E40, Mint condition. Tel: Michael, 0662 89422, evgs.
- * STE 4Mb RAM, £220, 4024Mb reference Hard Disk and clock carrying £175, SH1124 mono monitor £75, Golden Eagle 520 Mb hard disk, cheap software £65, 1st Super mulitcast monitor, perfect for screen-base £260. Tel: 02423 21691.
- * Atari bargains 520 mega 4 hard discs, Laser printers, Acorn plus load of software. Ring Laurie on 071 630 0199 dnu
- * Philips colour monitors £341+. As new £151 0484 541357.
- * MEGA ST4, £220. Phone 0582 833411.
- * 980 Mb extra £340. Phone 0582 833411.
- * 512MS monitor, £70. Tel: 0582 833411.

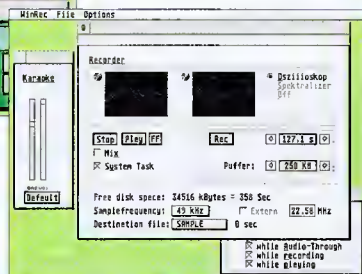
Direct-to-disk recording is the bee's knees as far as the music industry is concerned. Digital sound – music stored as data on a hard disk – can be altered and edited far more easily and effectively than analogue recordings on tape.

The equipment used in studios might cost the earth but with the hardware built into the Falcon, absolutely anyone can do it!

As you're probably aware, the Falcon contains analogue-to-digital and digital-to-analogue converters, meaning you can feed in sound from any source, convert it to digi-



Falcon D2D has a pretty interface and good effects



The best Karaoke of all – and registration is only £13!

Direct to disk

tal information and store it on disk.

You can also convert it back to analogue sound and play it through headphones or speakers. In other words, you can use your Falcon very much like a tape recorder.

On the downside, good quality sound samples take up a lot of disk space – a four-minute stereo track recorded at 50KHz will take up around 45Mb on a hard drive. That doesn't leave a lot of room if you're using the internal 60 or 80Mb model.

If you're a real music junkie, the Midi Aspects pages are the place

to be but for those of you looking to get into direct-to-disk recording and real time special effects just for fun, there are some budget programs well worth looking at.

To set them up, all you need is a set of leads to connect your music source up to the Falcon's microphone socket.

Most off-the-shelf microphones will plug straight in and let you record your own voice, in either mono or stereo according to the type of microphone, but if you're using a CD player or cassette recorder you will need to connect the line out jack or phono sockets to the Falcon.

For best results you'll also need some active speakers (battery or mains-driven) plugged into the Falcon's headphone socket, rather

John Hetherington turns his Falcon into a hi-fi as he takes a look at some direct-to-disk recording programs

than the tinny internal speaker which you'll have to turn off via the control panel.

A word of warning here – don't connect speaker outputs from any device like a hi-fi to the Falcon's microphone inputs.

Highly amplified signals will almost certainly damage the

undoubtedly popular – Karaoke. Musicom isn't much to look at but it's cheap, cheerful and it works. An enhanced version, Musicom 2, is due for release soon which offers dozens of new features like sample editing.

FALCON D2D

Falcon D2D is part of the software bundle from Atari we looked at last month and works in much the same way as Musicom.

It offers six sampling rates from 8 to 50KHz and some clever special effects ranging from echo, flanger and chorus to several different reverb effects corresponding to various types of rooms and halls.

It won't run on an SM124 monitor and the sound samples are saved in yet another proprietary format, TRM.



Compo's Musicom works very well and offers good value

machine and cost you a lot of money!

MUSICOM

Musicom was one of the first programs to arrive for the Falcon and it is still one of the best and easiest to use. It saves samples in its own SMP format but you can choose from 8-bit mono or stereo samples, as well as 16 bit stereo, and one of eight different sampling rates from 8.2 to 49.2 kHz.

Special effects include delay, flanger, graphic equaliser, harmoniser and the dreaded – but

It does have an interesting over-dub option that lets you add new information on to an existing track provided it was recorded at 33KHz or less.

WINREC

The third budget direct-to-disk sampler is a shareware offering that earns itself the honourable accolade of Falcon PD of the Month.

It is a fairly basic program that saves its own format files using one of eight sample rates, again from 8 to 49KHz, but the files can be packed to save space. The loss in quality is only small but higher sampling rates are really only practicable on a fast hard disk.

The two main advantages are the excellent Karaoke module and the supplied utility that lets you convert the proprietary sound samples into AVR files for use with other programs. What's more, Winrec will also use the LOD effects files from Falcon D2D, giving you an even wider range of special effects.

Karaoke comes home

You've seen it in the pubs and clubs – now why not try it on your Falcon? The Karaoke effect works on most popular vocal music and takes advantage of the stereophonic nature of the sound.

In most cases, particularly with solo artists, the vocals occur on both right and left channels so that the singer seems to be standing in the centre of the stage.

When the sound is being processed with the Karaoke effect on, the right and left channels are compared and anything common to both sides is removed.

The result is muted vocals rather than none at all but nonetheless it is great entertainment. Such a crude method has its disadvantages in that some instruments can be removed too but in general it works well for all kinds of tracks.

A. F. Weaver Engineering.....	83	Floppyshop.....	52	Silica Systems.....	73
Analogic Computer.....	19	Games HQ.....	92	ST Club.....	29
Arnor.....	15	Gasteiner.....	IFC, 3	System Solutions.....	6
AWF PDL.....	92	Hi-Soft.....	OBC	Take Control.....	92
Care Electronics.....	98	Jewel PD.....	92	The Upgrade Shop.....	58
CGS.....	9	Ladbroke Computers.....	11	Tumblevane.....	52
Drives.....	83	LAPD.....	20, 21	Warpzone PDL.....	42, 43
Eagle Software.....	65	Now Age PDL.....	30, 39	Wizard PD.....	52
Europress Direct.....	84, 85	Power Computing.....	IBC	WTS Electronics.....	58
Fast Engineering.....	98	Premier Mail Order.....	83		

FAST ST REPAIRS

Upgrades + Engineering requirements

**★ GUARANTEED
SAME DAY SERVICE**
£34.99 + parts
computers received by
11.00 a.m.

**★ NORMAL
SERVICE**
£24.99 + parts
(Typically 24 hrs)

Door to door pick up + delivery anywhere in
the U.K.

Also Mono + Colour Monitors

Central
London

Low Cost upgrading

STE to 1Mb.....	£13.99
STE to 2Mb.....	£49.99
STFM to 1Mb.....	£44.99
STFM to 2.5Mb.....	£79.99
TOS 1.4.....	£25.00
TOS 2.06.....	£POA
Double Sided Drive.....	£47.00
Power Supply.....	£39.95
Power Supply (Replace).....	£25.00
Fitting for the above from.....	£15.00

FAST ENGINEERING

144, Tanner St., Tower Bridge, London SE1 2HG

Tel. 071-252 3553

COLOUR KITS for MONO PRINTERS

Ever wished you'd bought a colour printer instead of a mono one? Wouldn't it be nice to print out pictures in colour? Now you can with Atari 'FlexiKolor Kit'. Each Atari FlexiKolor kit comes complete with everything you need to print in colour, including superb software. The colour kit is simple to use, the ribbons fit exactly the same way as your black ribbons so it will not affect your guarantee. Also on all models listed below

paper alignment is automatic, you do not have to manually align. PRINTS AS GOOD AS COLOUR PRINTER. If your printer is not listed below please phone. Atari FlexiKolor kits for Star LC10, LC20, all Star 24 Pin, Panasonic 1080/81/1123/1124, Epson FX80, LQ400, LQ800 etc. Citizen 120D+, NEC P6, P6+, Seikoshia 1900+. Please note colour kits come complete with coloured ribbons. **COMPLETE KIT £39.95**

FLEXIDUMP PLUS 2

THE COLOUR SOFTWARE FOR YOUR COLOUR PRINTER

- ★ Total colour control
- ★ Balance control for picture enhancement
- ★ Select area to be printed
- ★ Select size to be printed
- ★ Page control
- ★ Colour sieve
- ★ Ink correction
- ★ Automatic poster mode for larger than A4
- ★ Gamma correction (fully adjustable and saveable)
- ★ Spooler for colour letterheads etc
- ★ Multiple copy control
- ★ Colour correction
- ★ Colour/memo catalogue function
- ★ Imports a large range of file types including (IMG) larger than screen size, tiny, Spectrum 512, IFF, Degas, Neo, IFF (Amiga), HAM (Amiga) yes you can even print Amiga pics.
- ★ Colour separation (Print colour on your Bubble Jet)
- ★ Dot pattern control
- ★ Pattern rotate
- ★ Ideal for T-shirt printing
- ★ Now with 'smooth' control, get rid of those jagged edges.
- ★ Large range of dithering (dot pattern) modes.
- ★ Run in any resolution, view, manipulate and print in any other resolution
- ★ Colour catalogue function will print a miniature of each picture configurable between 1 to 8 across
- ★ Will drive 9 or 24 pin Star, Citizen Swift, Panasonic, NEC, Epson, Canon etc. The colour printers possible with this new version will astound you.

STILL ONLY £39.95 inc
UPGRADE FLEXIDUMP PLUS TO FLEXIDUMP PLUS 2,
ONLY £11.95 inc. RETURN MASTER DISKS

T-SHIRT PRINTING RIBBONS

PRINT ON NORMAL PAPER IRON ON T-SHIRT

4 Colour Citizen Swift.....	£29.95
4 Colour Citizen Swift (Reload).....	£14.95
4 Colour Star LC10.....	£14.95
4 Colour Star LC200 9 Pin.....	£19.95
4 Colour Star LC200 9 Pin (Reload).....	£12.95
4 Colour Star LC200 24 Pin.....	£29.95
4 Colour Star 24 Pin (Reload).....	£14.95
4 Colour Seikoshia SL 95.....	£29.95
4 Colour Seikoshia SL 95 (Reload).....	£14.95
1 Colour Citizen 120D/5wift.....	£11.95
1 Colour Star LC10.....	£11.95
1 Colour Star LC200 9 Pin.....	£11.95
1 Colour all Star 24 Pin.....	£11.95
1 Colour Epson FX80/LQ400/MX80.....	£11.95
1 Colour Epson LK30.....	£11.95
1 Colour Epson FX100.....	£11.95
1 Colour Panasonic KXP 1080.....	£11.95
1 Colour Taxis/Canon 1080A.....	£11.95
Heat transfer Pens 5 large red/orange/yellow/green/blue. Large pens have a marker size nib.....	£14.95 a set
Heat transfer Pens 5 small red/orange/yellow/green/blue. Small pens have a fine nib.....	£11.95 a set
T-SHIRT RIBBONS NOW AVAILABLE IN RED, BLUE, GREEN, BROWN, YELLOW AND BLACK AND FOR A WIDE RANGE OF PRINTERS	

Phone our order line on 0923 894064
Atari ROM Cartridge takes two 27256 or 27512 EPROMS. £11.95
ALL PRICES INCLUDE VAT AND CARRIAGE
Now available T-Shirt Printing for HP Deskjet. Also Printing on to Mugs, Plates, Glass and Aluminium with Transfer-Laq.

How to order: Enclose cheques/PO made payable to:
CARE ELECTRONICS or use Access/Visa.

MAIL ORDER

CARE ELECTRONICS

Dept STU, 15 Holland Gardens, Garston,
Warrford, Herts, WD2 6JN.
Tel: 0923 894064 Fax: 0923 672102

COLOUR PRINTER RIBBONS

Don't throw away your plastic printer ribbon cases when the ribbon wears out; just take the top off, take out the old ribbon and reload it with a new one. It's simple. Full instructions supplied.

Reloads for:-

Star LC200 9 Pin 4 Colour (Normal Ink)	1 Reload - £5.99.....5 Reloads - £29.95
Star 24 Pin 4 Colour (Normal Ink)	1 Reload - £6.99.....5 Reloads - £29.95
Citizen Swift 4 Colour (Normal Ink)	1 Reload - £6.99.....5 Reloads - £29.95
Panasonic KXP2180/2123 4 Colour (Normal Ink)	1 Reload - £6.99.....5 Reloads - £29.95
Seikoshia SL 95 4 Colour (Normal Ink)	1 Reload - £6.99.....5 Reloads - £29.95

Ink ribbons also available in Gold, Silver, Magenta, Orange, Purple, Brown, Green, Blue, Red for a wide range of printers.
Special re-ink for Panasonic printers and Star LC200 9-pin black 59ml bottle.....£14.95

NO MESS INK REFILLS FOR HP DESKJET PAINTJET AND CANON BUBBLEJETS

'CARE THREE PACK' will refill HP51608A Cartridge 3 times. The Canon BC-01/548 Cartridge 3 times. Three Pack available in Yellow, Magenta, Cyan, Red, Blue, Green, Brown, Purple, Black £14.98 each.
'TRI-COLOUR PACK' 1 refill of Yellow, Magenta and Cyan £17.95.

'CARE SIX PACK' will refill HP51608A Cartridge 6 times. The Canon BC/01 Cartridge 6 times.
6 PURE BLACK REFILLS ONLY £24.95
Please state type when ordering



telephone 0234 843388
facsimile 0234 840234
technical 0234 841882
(technical is available from 2-5.30pm)

series 900

The Series 900 HD features a buffered through port, optional battery backed clock, high speed 20ms seek rate, write protect switch, power supply and ICD interface and utility disk.

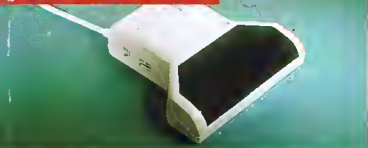
Series 900 52QMB.....£299
Series 900 120MB.....£349

icdlink

The 'Link' from ICD includes an external SCSI host adaptor, allowing the Atari ST to connect to external SCSI devices e.g external hard disks, optical drives and CD-ROM drives which were originally designed for the Apple Mac, IBM PC etc. Just plug-in and no power supply is needed.

ICD 'Link'.....£89
AD SCSI Plus.....£89
AD SCSI ST.....£79
ICD Pro Utilities.....£39.95

powerscanner



The award winning scanner from Power Computing allows you to scan up to 400DPI in real-time greyscale, with an autoscane rate detect. The scanning software included allows you to edit and manipulate any image you scan.

£99

floptical drive

The Floptical stores 20MB of data on a 3.5" disk. ICD 'Link' is required.

Floptical drive.....£329
Floptical disk.....£22 each

printer range

A huge range of printers available, Star, Citizen, Hewlett Packard and Epson. Please telephone for prices and your requirements.

miscellaneous products

PowerMouse.....£15
Power Clock.....£17.99
Optical Mouse.....£29.95
Replacement Optical Mat.....£10
100 Branded Disks + Box.....£49
10 Branded Disks.....£4.99
Entruder 1 Joystick.....£29.99
Maverick 1 Joystick.....£15.99
Python 1 Joystick.....£9.99
Apache 1 Joystick.....£7.99

!! Power Computing Ltd products come with a back to base 12 month guarantee. Prices are valid for the month of publication only. Goods are sold subject to our standard terms and conditions of sale and are available on request. Specifications and prices are subject to change without notice. trademarks are acknowledged. All prices include VAT. E & OE.

powerdrive



The award winning external disk drive which includes a virus blocker, built-in Blitz Turbo and is able to boot from drive B. This is the ultimate in external disk drives for the Atari ST computer.

£60

powerdrives

Power Computing manufacture many disk drives for the Atari ST, all of which are made from high quality components.

PC720P (Inc. PSU).....£55
PC720I (Internal).....£39.95
(360K upgrade drive, needs case modification)
PC720 OI (Official internal).....£45
(720K replacement drive)

drive-b cable

If you have an internal drive that is not compatible with 'boot from drive B', this cable will solve your problem.

Drive-B Cable.....£9.95

blitzturbo

Back-up disks at lightning speeds, Blitz copies from the internal to the external drive and cleverly by-passes your ST's controller chip. In around 40 seconds you can back-up an ST disk, what's more you can now switch between your disk drive and Blitz Turbo without disconnecting your Blitz interface. Probably the best Atari disk copier on the market. (1988 Copyright act applies)

Blitz Turbo.....£25

supra modems

Supra Modems come complete with English phone cable, RS232 serial cable, heavy duty PSU and comms software, send and receive fax's, 100% compatible with industry standard 'AT' command codes, free trial offer to various services and V42 bis data compression.

Supra Fax Modem+.....£119
Supra Fax Modem 32BIS.....£249

ring interruption

Use with Ultimate Ripper or SuperMon. Stop games or programs in their tracks, search for infinite lives and hack with the code. A press of a key and the program is restarted.

Ring Interruption.....£15

supermon

SuperMon comes with all the features of the 'Ultimate Cartridge' and more. Some of the features included with SuperMon are: Program Switcher- allows two programs to be in the memory simultaneously and switched between at the touch of a key, Printer Spooler- allows files to be printed at the same time as other tasks, Comprehensive Debugger- disassemble programs and step through them, intercept OS calls, search memory or find where a routine is called from automatically, Diagnostics Function- check the internal functioning of your ST disk analyser, custom format disks, read/write sectors, hide files, Utilities- the SuperMon also has many utility functions available, including reset proof RAM disk, mouse trap function, time display, screen snapshot and 50/60Hz display toggle.

Ultimate Cartridge.....£25
Including SuperMon.....£35

2mb ram board



The Atari RAM Board requires no soldering and plugs directly inside the ST using the latest capacity RAM chips. Full fitting instructions are supplied. The ST RAM Board is available either as a 2MB or 4MB RAM expansion.

£99

4MB RAM Expansion.....£169
1MB SIMM for STE.....£35
512K RAM STFM.....£45

order form



Return this order form to Power Computing Ltd, Unit 8 Ralston Road, Woburn Road Ind. Estate, Kempston, Bedford MK42 7PN

Name _____

Address _____

System owned _____

Telephone No. _____

Description _____

I enclose a cheque/PO for £ _____

Credit card No. _____

Expiry date _____

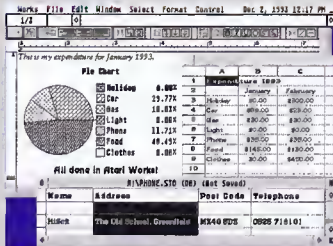
Signature _____

Make cheques payable to Power Computing Ltd

delivery next day £5.00 2-3 days £2.50 Saturday £10.00
 deliveries are subject to stock availability

New Software for a New Year

Business Applications



Atari Works

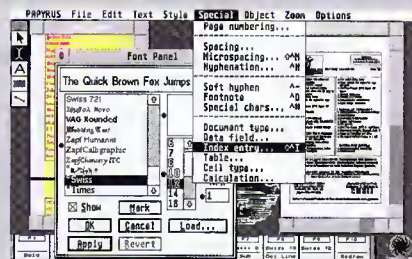
The comprehensive, up-to-date, integrated business package for any Atari 680x0 computer with 2Mb of memory and a hard disk. Atari Works contains a word processor, a spreadsheet and a database in one program, so that swapping between the applications is a piece of cake!

The word processor contains all the normal editing functions plus the drawing of lines & boxes, graphic import, spell checker and thesaurus, mail merge etc.

The spreadsheet is as powerful as many people will ever need - organise your data clearly and simply as text, percentage, fixed or floating-point or currency and then, using the 53 built-in functions, create interdependencies between your information. Then display the results graphically with pie charts, line graphs etc. and cut/paste these into the word processor!

The database is a joy to use; create as many fields as you need and position them on your form using the mouse. Once the data has been entered you can sort it, match records, find specific entries and produce reports, all quickly and simply. It is easy to import data from other databases and export data for use with the mail merge facility of the word processor.

All modules support the new SpeedoGDOS and are fully integrated - Atari Works is probably the most powerful integrated package yet seen on the Atari computers.

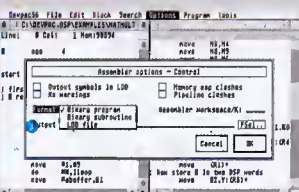


Papyrus

If you need a high-end word processor with many desktop publishing features then Papyrus is the new package for you.

The application is ideal for producing all types of professional-looking output, from one-page flyers to complete manuals. With extensive SpeedoGDOS support, paragraph styles, headers, footers, footnotes, reliable undo, automatic table of contents, flexible zoom, index creation, full margin control, freely adjustable paper format, letter micro-spacing, GEM vector import, text flow around objects, master pages, RTF support and more, Papyrus is the premier choice for all serious writers and designers.

Programming



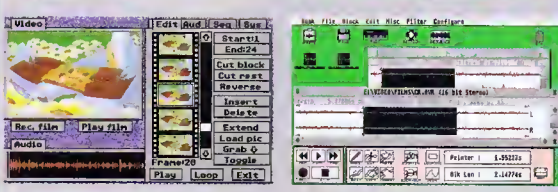
DevpacDSP

Another new programming package joins the HiSoft family of languages for the Atari 680x0 computers. DevpacDSP is a complete development system for the Motorola 56001 digital signal processor used in the Falcon030.

Remember that we've also updated our other programming languages for the Falcon. Devpac 3.10, Lattice C 5.60 and HiSoft BASIC 2.10 all contain extra libraries/include files for the Falcon, an extended debugger that works in all Falcon resolutions and much more. The *Modern Atari System Software* book (free with Lattice C 5.60) gives full Falcon developer documentation.

DevpacDSP consists of a fast 56001 assembler, fully integrated with our friendly GEM editor, which supports macros, conditional assembly, include files and direct production of .LDD files or Falcon binary plus an easy-to-use GEM-based debugger for disassembling and stepping through your code, modifying registers, setting breakpoints etc.

Video/Music



VideoMaster

The best-value real-time video digitiser you can buy. VideoMaster is available for the ST/Ste and, in a special enhanced true colour version, for the Falcon. VideoMaster RGB includes our new colour splitter, ColourMaster and produces amazing quality colour stills.

Clarity

Clarity is our latest sound sampling system for the Falcon. Featuring an extensive sample editor, a complete drum sequencer and a powerful MIDI controller, Clarity is an ideal companion for all musicians. Includes extra hardware for CD (44.1KHz) and DAT (48KHz).

Utilities



Harlekin 3

This popular collection of utilities for all Atari computers gets another facelift. Harlekin 3 contains a multitude of enhancements including a multi-file editor, a new communications module with a scripting language, support for high density disks, a new Alarms module,

for use with the Manager, separate keyboard and font editors and much more. The whole package has a new look, with all modules in a window or a flying dialog so that they can be moved and the memory configuration is now even simpler. Upgrades from Harlekin 2 cost only £19.95.

If you have difficulty obtaining our new titles, just call, quoting your Access/Mastercard/Visa/Switch/Connect card number and expiry date and we will despatch the goods within 5 working days. For an extra £5 we will despatch the day of order by ParcelForce 24 hour service. Ask for our new 32-page catalogue.

VISA



All products on this page are either available now or by the end of January '94 - please call to confirm availability and pricing.

HiSoft
High Quality Software

The Old School Greenfield
Bedford MK45 5DE UK.
Tel +44 (0) 525 718181
Fax +44 (0) 525 713716

© Copyright HiSoft 1994. E&OE.